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BALTIMORE, AUGUST 1, 1907.

### SAN FRANCISCO.

San Francisco's disaster of 15 months ago centered the attention of the country for quite a while upon that city, with the result of arousing in the East interest in the Pacific coast generally. The interest continues to grow, and nothing illustrates it better than the comments in the South and other parts of the country upon the recent article dealing with conditions at Los Angeles, prepared by Mr. Albert Phenis, the special correspondent of the MANUFACTURERS' RECORD. That was the first of a series of articles which he is writing about the Pacific coast, and the second appears in this week's issue of the MANUFACTURERS' RECORD. It is an illuminating treatment of the situation at San Francisco, with its many difficulties and many complications, but a situation which Mr. Phenis views from an optimistic standpoint and from which he draws valuable suggestions.

### MISTRAINED BOYS.

President Arthur T. Hadley of Yale University is quoted as saying:

When these play studies begin to be valued for their own sake there is trouble. There was a time when we had a good deal of that trouble. There was a generation of boys and girls who could not spell or make a sum come out right or accept the responsibilities for hard school work of any kind. Fortunately, the worst of this period has passed. Our boys today spell better and work harder and have more intellectual responsibility than they did five or ten years ago.

That is the pedagogue's view. Now go outside of the schoolroom and ask

every business man you meet, every officer of great corporations, such as railroads and telegraphs, and every man who employs boys and men, and nine out of ten will tell you that every year finds employees less willing and less able to work, with less sense of responsibility and a deterioration, especially of boys, which is one of the most serious problems before this country. In any group of 10 boys taken on an average anywhere we doubt whether there will be over one in the lot who by honesty, faithfulness to work and a realization of his responsibilities deserves to succeed. Any well-regulated office is forced to dismiss five boys for one it keeps if it would maintain the right tone and character of its employees. Fifteen years ago this was not so. The thoughtful men of today who come in touch with the boys after they leave school are profoundly concerned about this condition, to which the school teachers of the land seem largely oblivious.

### EPOCH-MAKING DISCOVERY OF IRON ORE.

The discovery of more than 600,000,000 tons of iron ore anywhere would be of worldwide importance, but when the discovery is made at a point distant but a few miles from a splendid harbor giving cheap water transportation it becomes doubly important. Such is the discovery which has been made by the Pennsylvania Steel Co., of which the Maryland Steel Co. of Sparrows Point, Md., is a subsidiary organization. This ore has been found in Cuba, and under conditions as unique as its extent is important. It is mainly in the form of red earth, the top surface containing several million tons of a hard shotlike form, while that below is more in the form of clay. There is no overburden. As you walk over the surface of the ground you are treading on the iron ore. After two years of thorough investigation, which included the boring of several thousand drill holes, the company has secured 27,000 acres of land with an average depth of ore of 19 to 20 feet, and has proven up in this way an aggregate of more than 600,000,000 tons, more than twelve times the annual output of ore in this country. Its mining is practically a steam-shovel proposition. The ground is now covered with a pine forest somewhat similar to the pine of the South, but of smaller growth. The property is located on a plateau 10 miles long and four miles wide in the province of Oriente (formerly Santiago de Cuba), which is on the north coast of Cuba about 12 miles from the Bay of Nipe, considered one of the finest harbors in that country. The plateau has an elevation of about 1600 feet at the end of the nearest bay, from which it increases in a northwesterly direction to 2300 feet. Owing to this elevation the climate is exceedingly favorable for work, the nights always being cool enough for a blanket. This gives the advantage of an all-the-year-round mining condition with uninterrupted trans-

portation for every day of the year, instead of being blocked by ice for the whole winter, as in the Lake Superior district.

It is proposed by the company to calcine the ore prior to shipment. When calcined it averages 55 per cent. of iron and is very low in phosphorus, making it an exceptionally good ore for Bessemer steel. The property stands in the name of the Spanish-American Iron Co., every share of the stock of which is owned by the Pennsylvania Steel Co. The work of development is already under way. After two years of thorough testing and a shipment of 5000 tons to Sparrows Point, which was made into steel rails which are now in use on the Pennsylvania Railroad, the company is preparing to begin mining operations on a large scale. It will construct about 20 miles of railroad through the property to Nipe bay, at which point a large wharf and ore-handling facilities will be built.

With such a vast body of ore which can be mined by steam shovels at so trifling a cost, the Pennsylvania and the Maryland Steel companies are immediately given a position in the metallurgical world of preeminent importance. It may be accepted as a fact that the ownership of such a body of ore will necessarily be followed in the not distant future by a very large increase in the plant of the company at Sparrows Point, and possibly also in the Steelton plant. The natural supposition, however, would be that with such an admirable location as the company now has at Sparrows Point it will there concentrate the great increase which it must of necessity make in its furnace and steel rail capacity. At Sparrows Point there are now four large furnaces, a steel rail mill and a shipyard, employing in the aggregate some thousands of hands. With this supply of ore sufficient for the utmost needs of the company for many years to come, it has the foundation to justify a stupendous enlargement of its Sparrows Point works, and it is quite within the range of possibility that within the next year or two a number of large furnaces will be built as an addition to the present plant.

When the United States Steel Corporation was organized it estimated its total supply of ore at 750,000,000 tons, and capitalized this at \$1 a ton in the ground. The importance of this Cuban discovery, considering the cheapness of mining and the open climate 12 months in the year, makes it rank next in importance in the world's iron affairs to the discovery of the Mesabi district. Owing to these favorable conditions, mining operations on an enormous scale can be quickly developed, and within the next few years Baltimore ought to see its importations of ore doubled, if not quadrupled, and such an increase in furnace capacity and steelmaking at Sparrows Point as to give this city preeminent position in the world's metallurgical interests. It was but a few weeks ago when the MANUFACTURERS'

RECORD published an important article by Prof. John J. Porter, assistant professor of metallurgy at the University of Cincinnati, in which he took the ground that there would be three great iron and steel centers in America. One of these central points he fixed as the Lake region, dependent upon the Lake ores; another would be Alabama, which he estimated to have a very much larger quantity of available ore than is known in the Lake Superior district, and by the side of its ore vast coking coal fields, while the third great central point, in his opinion, would be on the Atlantic seaboard, at some point on the Chesapeake bay where the coking coal of Virginia and West Virginia could advantageously meet foreign ores. This discovery in Cuba makes certain the fulfillment, in part at least, of his prophecy by guaranteeing that there will be a great increase in the iron and steelmaking interests at Sparrows Point, which is in the upper part of the Chesapeake bay a few miles from Baltimore. Whether this new supply of ore will be available for the general market and thus help to give the basis for a further fulfillment of his prophecy by the establishment of other iron companies dependent on it remains to be seen. In view, however, of the ever-increasing demand for iron ore under the enormous expansion of the world's iron and steel trade, it would seem to be more than likely that the owners of this property will hold its ore for their own exclusive use rather than to put it on the market for the benefit of others, though the quantity is great enough to justify selling largely in the open market.

### EXPANSION OF IRON INDUSTRY AND THE SOUTH'S FAILURE TO KEEP PACE.

Seven years ago, or in 1900, the total production of pig-iron in the United States was 13,789,242 tons. For the first six months of 1907 the total production was 13,478,044 tons, or only 300,000 tons less than the output for the whole of 1900. These figures indicate something of the marvelous expansion of the iron industry. The output for 1907 promises to more than double the total production of 1900. It has usually been counted that the iron trade of the country doubles on the average every 10 years. In this case it will double in seven years. But even these figures are hardly as surprising as the fact stated in the semi-annual report of the Bulletin of the American Iron and Steel Association just issued, that as late as 1894 the world's production of pig-iron amounted to only 25,600,000 tons, which the United States almost reached in 1906, and will largely exceed in 1907. We are thus making in this country more pig-iron than the world made 13 years ago.

The report of the Iron and Steel Association just mentioned gives the total production of iron by half-year

periods for the last four years as follows:

	Periods.		Total.
	First half.	Second half.	
1904.....	8,173,438	8,323,595	16,497,033
1905.....	11,163,175	11,829,205	22,992,380
1906.....	12,582,250	12,724,941	25,307,191
1907.....	13,478,044		

By States the production for the first half of 1907, compared with the second half of 1906 and with the first half of the same year, was as follows:

States.	Production.		
	Gross tons of 2240 pounds (includes spiegeleisen and ferro-manganese).		
	First half of 1906.	Second half of 1906.	First half of 1907.
Massachusetts.....	10,218	10,021	8,746
Connecticut.....	746,571	806,388	859,125
New York.....	167,820	211,570	155,245
New Jersey.....	5,688,743	5,559,126	5,964,884
Pennsylvania.....	194,807	191,802	221,145
Maryland.....	257,806	225,719	260,912
Virginia.....	46,865	45,734	26,173
Georgia.....	825,090	849,758	861,771
Alabama.....	136,662	167,872	151,643
West Virginia.....	35,533	62,594	79,013
Kentucky.....	203,569	223,305	193,371
Tennessee.....	2,675,812	2,661,321	2,815,174
Ohio.....	1,011,639	1,145,227	1,263,258
Illinois.....	175,972	193,784	197,330
Michigan.....	190,949	182,374	160,045
Wisconsin.....			
Minnesota.....			
Missouri.....			
Colorado.....	214,694	198,346	220,269
Oregon.....			
Washington.....			

Total..... 12,582,250 12,724,941 13,478,044

The increase in the production in the first half of 1907, as compared with the first half of 1906, was 895,794 tons, while compared with the second half of 1906 the gain was 753,103 tons. In the latter half of 1906 the output was only 142,000 tons larger than for the first half of the year. If the gain during the latter half of this year over the first half should be no greater than the gain during the corresponding periods of last year we will still have a total production for the year of something over 27,000,000 tons.

The unsatisfactory feature of this marvelous expansion of the iron industry is the comparatively small progress made by the South. Of recent years this section has shown comparatively little increase in iron production. Notwithstanding the unequalled natural advantages of the South, the momentum of development in the North and West has been so tremendous as to center the largest iron and steel development in those sections rather than in the South. On June 30 29 furnaces were in construction and 13 others had been projected, and of this total only two, one in Virginia and one in Alabama, were to the South's credit. This lamentable condition shows that, notwithstanding the great progress which the South is making in iron and coal and other interests, it is not by any manner keeping step in iron and steel with the advancement of the North and West. Fifteen years ago this was not so. The South was then doing, in proportion to the progress of the iron interests of the country, far more than it is doing today. We have fallen behind.

The consumption of iron by Southern foundries and machine shops has increased so largely that this section is no longer almost wholly dependent upon the West and North for a market for its pig-iron as formerly. Moreover, a very large proportion of its iron output is going into the finished products of steel rails and rods and wire. Owing to this increased consumption of Southern iron for steelmaking, this section has less iron for the open market and far less for the Western market than it had 12 or 15 years ago. Our home consumption of iron is developing far more rapidly than our production, and unless there shall soon come about some plans for the broader development and increase of ironmaking in the South

there will not be enough Southern-made iron for home consumption. These facts should appeal very forcibly to capitalists seeking investment in profitable enterprises, for when well managed no industry in the country has been more profitable than ironmaking, and should likewise appeal to the larger consumers in the South of pig-iron, that they may be preparing to forestall the danger of a supply of Southern iron unequal to the needs of this section. It is time for the capitalists and the iron-making interests of the South to wake up to the situation. It is true that labor is scarce. It is likewise scarce in other sections, but they are putting forth the energy necessary to secure the labor, that they may carry on the expansion of this industry on a scale commensurate with the world's increasing needs. What is the South going to do with this industry. Go ahead or stand still?

#### ACHIEVEMENTS IN OTHER PARTS AN INSPIRATION FOR THE SOUTH.

In a recent issue of the MANUFACTURERS' RECORD attention was called to the wisdom of the people of the South keeping informed of the progress of other sections in order that they may thereby be stimulated to do still greater things themselves. Commenting on this, the *Gazette of Jacksboro, Texas*, says:

This is what Jacksboro people need to do, to see and know what other towns and other people are doing to build up, expand and develop. Small ideas and penuriousness can never build a big, progressive town, neither can talk without effort and money well spent do the work. One trouble is that too many people are like the little boy's "pa," "established" in their ways, which, perhaps, are the ways of 50 years ago, and they do not even cast a look around them to see what progress the world has made in the last few years in the way of growth and development, but simply plod along, taking what they can get, what is thrust upon them. It is time for Jacksboro people to awaken to the fact that other people and other towns are doing things. They are organizing immigration leagues to secure home-seekers, organizing factory clubs, building railroads, schoolhouses to accommodate a rapidly-growing population; they are arranging for parks, for pleasure grounds and resting places. What is Jacksboro doing?

The *Gazette* is quite correct. There is a great disposition among our Southern people to be too well satisfied with what we have accomplished, because of a lack of knowledge of what other sections have been doing. It is even true that people in different Southern States, well versed as to what their individual State is doing, know comparatively little about what other Southern States are working out. We have found leading coal and iron people in Birmingham tremendously impressed with the progress of their State, but densely ignorant as to the development in kindred lines in West Virginia, Kentucky and other Southern States, just as the coal men of West Virginia and Kentucky know entirely too little about what Alabama is doing. Leading business men in Georgia seem dumfounded when one tells them about the iron ore resources of Alabama, and the iron people of Alabama know very little about the marble and other interests of Georgia. So narrow is the horizon of many individuals and of many communities that they are able to see nothing but what is being done in their own limited range of vision, and if this community shows greater progress than in the past they are well satisfied and believe that they are doing more than anybody else.

We have heard Southern men talk about "the industrial decay of New

England," and of the South having "beaten New England to a standstill," oblivious of the fact that New England's industrial interests have more than the fabled nine lives of a cat, and that if every great industry in that section were destroyed the brains and energy of its people would enable them to construct some new form of industrial activity. A people who can come South and buy our cotton and coal and iron and timber and, depending wholly upon these raw materials, can establish an industrial business covering every line of human activity, from the making of pins and needles to the building of ships, cannot be downed by competition of any section. And when a few years ago New England waked up to the fact that the South was running away with a considerable part of its textile industry by equipping its mills with more modern machinery than the mills of New England then had, that section suddenly turned in and commenced the practical reconstruction of its spinning interests. There is, in fact, throughout New England everywhere evidences of a great revival of industry and a scarcity of labor as marked as in any part of the South, so our friends need not feel that they have beaten New England. And then until the MANUFACTURERS' RECORD published the fact a few weeks ago, probably few people in the South realized that any city on the Pacific Coast was beating everything east of the Rocky mountains in the rapidity of development.

The individual or the community aiming for broad, comprehensive work cannot accomplish the best results without being cognizant of what is being done elsewhere. As individual success is the greatest stimulus to make other men do their greatest work, so community growth is the greatest incentive to stimulate other communities to accomplish results. If, for instance, Charlotte and Spartanburg and Anderson learned that Greenville was beating them in the rapidity of development, or was planning for broad schemes of beautifying and improving the city, or if they learned that the citizens of Greenville were running a race as to who should have the most beautiful private grounds, thus adding to the attractiveness of the city, the people of Charlotte and Spartanburg and Anderson would be quickly stirred to great activity in similar lines. It is the power of example, of achievement, that tremendously affects and influences human life. The Southern community which lives within itself, which does not keep in touch with the broad activities not only of its own State and its own section, but of the whole country, and, in fact, to some extent of the whole world, lacks the stimulation which comes to those who, with full knowledge of what others are doing, catch the inspiration of their achievement and seek to match their work.

One aim of the MANUFACTURERS' RECORD has ever been to acquaint the South and the world at large with the resources and progress of the South, but an equally important aim is to stimulate the people of the South to know what others are doing, to broaden their knowledge of the material advancement of individual communities, of States and of the whole section, as well as of the entire country, and once in a while to give them a glimpse of the forces which are making for world-wide activity. It is for this reason that the MANUFACTURERS' RECORD is of value to every live, thinking man in

the South, and to every man who wants to be alive and wants to be a factor in the upbuilding of his own community and his own section. If you can find any other paper which does this more comprehensively, then read that, but if you can't, then take a regular course of reading in the MANUFACTURERS' RECORD.

#### MAN WANTS MANY THINGS HERE BELOW.

Do you want anything, and, if so, what do you want?

Do you want a position?

Do you want an agency?

Are you looking for agents?

Are you a landowner or agent seeking to find buyers for your property?

Are you engaged in any line of business which you want to bring before the attention of the general public?

If so, turn to the "Classified Opportunities" department of the MANUFACTURERS' RECORD and find what others are doing. In that department you will find men wanting positions and positions wanting men; you will find real estate of all kinds, timber lands, coal lands, iron lands, farms, cotton mill, brick plants, hardwood factory, electric-light plant and water-works, a hotel and many other things of equal interest for sale. And then you will find capital wanted by a bolt and nut factory, that a treasurer is wanted in a manufacturing company, likewise an assistant manager in another enterprise. You will find opportunities for investment on mortgages, in the stocks of going concerns, in real estate; you will find banks advertising for business and bank vaults offered for sale. Crossties are advertised, and likewise patents and suggestions as to patenting your ideas. A number of towns are offering attractive opportunities for the location of manufacturing enterprises; one wants a hotel, another offers natural gas, others present their attractions in the way of coal and timber, as well as natural gas.

But we need not particularize. In this department is found a medium of communication between all classes. You cannot afford to miss reading it, because there may be something in it which just meets your needs, or something which would suggest to you new ways of making money. You cannot afford to miss advertising in this way, because by doing so you may miss chances of money-making which had never occurred to you. Do you ever stop to think of the thousands of opportunities for doing business through the study of advertisements or through using freely the advertising columns of such a paper as the MANUFACTURERS' RECORD? You may lose a great deal of valuable information by not watching carefully the reading columns of the MANUFACTURERS' RECORD, but you will certainly lose a great deal if you do not carefully read its advertising pages. No man, be he merchant, manufacturer, banker, real estate operator or in professional life, can afford not to scan closely, once in a while, at least, every advertising page, for in this way many new ideas will be presented to him and new possibilities for business which would otherwise never occur to him.

Illustrative of the value of this department is a letter from the J. S. Fuller Construction Co. of Cullman, Ala., under date of July 22. This company, having advertised for two experienced men, writes us as follows:

Please take advertisement out of your paper, as we have got the man we are looking for, and, furthermore, we think we will have



to have an extra train to bring the letters in answer to this advertisement.

If you would have similar results, whatever it be that you want, "go thou and do likewise."

#### TEXAS' ANTI-PASS LAW AROUSES IRE.

Publishers and editors, more particularly those connected with country papers, declare they will go on the warpath and take the political scalps of members of the Legislature who voted in favor of that feature of the law which prohibits the exchange of transportation for advertising. They advocated all other clauses of the law, and declare that the section cutting them off from anything but what is open to the general public is a piece of spite-work because they favored an anti-pass law. They still believe as well as insist that the measure is a salutary one, but contend that to deny them the right to exchange advertising for transportation is an interference with the right of contract, and therefore unconstitutional.

Men who aspire to another term in the Legislature or any other public office will need, it is asserted, the support of these publications, and it is promised that when election time comes they will get the coldest kind of a frost if they ask for such backing. This is shown in several hundred letters written by the editors to the general passenger agent of one of the roads in the State, who called in their transportation.—*New York Commercial.*

It is evident that the *Commercial* is mistaken. It is, of course, impossible to believe that journalists, many of whom have been unsparing in their denunciation of rebates and trusts and railroad combinations, could for one moment oppose a law which prevented their receiving privileges unshared by their less favored fellow-men. Perish the very thought. For why should they receive special privileges or special rates when millions of other toilers were left out in the cold? The *Commercial* has evidently been imposed upon by some wicked joker. Needless to say the Texas papers are not in any such conspiracy as is here claimed. Having denounced railroads and trusts, having hurrahed for the mob that has been striving to wipe them out of existence, having for years "sicked on" the boys in their play of death to the frogs, they surely are not now kicking against their own work. We are astonished at the *Commercial's* giving publicity to such slanders.

#### NEW YORK'S SAD FLIGHT.

Under its national charter and in possession of \$43,000,000 for "uplift" work, the General Education Board seems to be empowered to do almost anything in the world, from inducing flamboyant Southern phrase-making to ask Philadelphia to help the South to be free, and to win applause from supposed Southern intelligence for its glowing absurdity that "the South has entered for good and all upon its probation as a member of modern society," to setting a horde of Southern "educational statesmen" falling over one another in a scramble for a whack at the endowing dollars without questioning the purpose of endowment or its ends.

But the General Education Board, with its wonderful entourage, seems to be helpless within its own home.

Since the first of May there have been 146 known cases of attacks upon women and children in New York city. If there is any place in this world more in need of education than New York city, the facts about it are not apparent.

Why not pay the fares of a bunch of Southern "uplifters" to a Southern Conference for Education in New York, or, better still, entertain them on Lake George while in sweet communion they settle for all time the terrible social

conditions in the benighted metropolis? They would have a pleasant summer outing, at any rate.

#### PRACTICAL HINT FOR IMMIGRATION WORK.

Special correspondence from Halifax, England, published on another page of this week's issue of the *MANUFACTURERS' RECORD*, dealing with the question of the migration of English people to this country, not only throws light upon the comparatively slight movement of that class of immigrants to the South, but contains an exceedingly practical suggestion worthy of careful consideration by the manufacturing interests of the whole country. It is pointed out that little is known in England of the needs of the South as to labor and of the opportunities there for thrifty workers, and that much of the educational propaganda furthered in England is concerned with the attraction to the South of individuals having some little capital to invest in farm lands rather than those seeking employment in agriculture or manufacturing. In that respect there is a sharp contrast with the work being done for Canadian immigration through the London agency of the Canadian Manufacturers' Association. There the effort is made to learn the homeseeker's desires, capacity, and character, and he is given definite information about the place and pay awaiting him in the Dominion. This plan of publicity is in close co-operation with the Government Emigrants' Information Office, which, of course, shows a marked preference for Canada over the United States.

It may not be possible to establish in England or in other foreign lands such a satisfactory machine for direction of immigration to the United States, but it is believed that some such a representative body as the National Association of Manufacturers may find more profit and obtain more practical results in devising some adaptation of the scheme to the necessities and the opportunities of this country than in seeking to further devices of a radical character in opposition to radical positions assumed by organized labor. It may be assumed that certain elements in organized labor will resist any kind of an attempt to facilitate the proper manning of American industries. But wisdom on the part of the association in so carrying out its plan as to demonstrate no hostility to the real interests of American labor, no intent to induce the immigration of a desirable class of workmen for the purpose of cheapening wages here or interfering with voluntary agreements between employers and employees as to hours of labor or other conditions, will tend to remove possible causes of opposition from labor. Irrespective of that, however, the association should organize upon broad businesslike basis a campaign, first of all, to impress upon members of Congress the absolute necessity for legislation bringing the administration of the immigration laws out of its present chaos and, if men now supposed to be representing the people of the country in Congress have not the capacity or the willingness to frame an immigration law in the interests of the whole country, and not as a result of a compromise of contentions advanced by conflicting minority elements, to send to Congress capable men. With intelligence and patriotism in Congress to deal with, the association should insist upon the repeal of all legislation looking to the prohibition of work under

separate State auspices at the place where such work is most effective, the country of the desired immigrant, and to the substitution for State campaigning abroad the exercise of any such enormous power over American industries as that lurking in the newly created Division of Information in the Bureau of Immigration and Naturalization of the National Department of Commerce and Labor, undertaking a "beneficial distribution" of immigrants after they have been admitted to this country. Such repeal effected, the association, which is fairly representative of the conservatism and common sense of America, should stand ready to co-operate in every legitimate way with the activities abroad of duly accredited immigration agents of the several States charged with the task of making known, as they may best do, the needs and the advantages of their States, and of furthering the movement of immigration permissible under the general laws of the United States. The association should, by all means, leave nothing undone to reduce to the lowest limit the participation of any bureau or commission of the Federal Government in the immigration problem, whether or not the association enters upon any active campaign for the advancement of immigration.

#### KEYNOTE OF COMMUNITY SUCCESS.

The story of the growth of Los Angeles and the reasons for it, as recently given in a letter by our Mr. Phenix, continues to attract attention throughout the South. Many papers are using the facts presented as reasons why the South should adopt the methods which have brought such success in Los Angeles. The *Telegraph* of Bluefield, W. Va., for instance, says:

Bluefield, "the city of eternal boost," as one says of Los Angeles, is here. It is the city of the middle Alleghenies—looks like one, feels like one. It is a city of young men. They are busy, but have time to talk Bluefield. They believe in it. Provision is being made for manufacturing. The idea of sending money out of town for anything that can be made here! It is absurd. Bluefield people are for Bluefield. That is why it advances so rapidly. In no sense a coal-field town, it is the metropolis of the coal field. Back of her is agricultural and cattle-raising Southwest Virginia. Forty-one miles east is the Potts Creek iron-ore field. Everywhere about is timber. Why shouldn't a Bluefielder boast?

Bluefield has a right to boast, but its boasting will be largely in vain if nobody hears it boast. An individual or a community may have the greatest opportunity in the world justifying boasting without end, but if that boasting is done in such a way that nobody outside ever hears about it or knows about the justification for it, then its boasting will have been a waste of breath and energy. Along this line is the thought of the Birmingham *Ledger*, which, pointing to what California has done and what Alabama might do, says:

Their land and ours is always a story to tell. The magazines are filled with advertisements of California desert lands that can be irrigated at \$40 and \$60 an acre. It is wonderful that people will go out there and pay such prices.

The *Ledger* has an idea that if Alabama would advertise to the world the beauty of her farms and products of her lands, the springs and streams and forests, her schools and churches, her near markets and her advantages of all kinds, it might attract people.

Better land than that of California can be bought for less than half that money, and there is no need for irrigation, and the country is already attractive. There is reason to think that we could get a great many immigrants of the kind we want.

It would be far better to get immigrants who would buy farms amid our people, and in that way be more quickly absorbed into

our population. The colony plan makes it longer to make strangers part of our population. Therefore the plan of special advertising, like California does, is an excellent plan of campaign. In that way each farm or plantation can be sold separately. Family by family we can increase our population.

If the State should do this intelligently, we would soon begin to get returns. It would cost the State something, but every family that would come and buy land would be a constant asset in our domestic economy.

The *Ledger* strikes the keynote of success. If the South, individually and collectively, made its advantages known as vigorously and unceasingly year after year as California has done, it would more than duplicate California's growth. And would you know something of California's wealth? Well, it has, according to the census figures for 1904, 1,593,717 population and \$4,115,491,106 of wealth. Its average wealth per capita is \$2582, against \$1318 as the average for the whole country. If the South were as rich in proportion to population as California, it would have nearly \$75,000,000,000 of wealth, or nearly four times what it now has. And yet the South has greater wealth-creating potentialities than California. It is our own fault if we don't outdo California.

Some months ago an expert, who for years had been employed by leading railroad systems to investigate the resources of different sections of the West and of California for the building of branch lines, went South and made a similar investigation in Georgia. Discussing the result of his study with the *MANUFACTURERS' RECORD*, he stated that in all of his experience on the Pacific coast he had never seen a country that offered such advantages and attractions for railroad development, for farming and for fruit-growing as he had found in that part of Georgia where he had spent weeks looking into the resources of the country with the same care with which he had studied conditions on the Pacific coast in times past. What is true of that part of Georgia is true of a large part of the South.

And then consider the charm of climate and the beauty of scenery in the mountain region of the South. A few years ago the writer said to a leading railroad officer of the South that if any important Western road had such a territory tributary to its line as Western Carolina it would spend \$100,000 a year advertising it, and the world would know as much about the charms of that land of wonder and of beauty as it knows about the mountains of Colorado and the climate of California and the attractions of the Adirondacks.

Too long have we slept on our advantages. Everybody has been waiting for somebody else to do the work. Towns and cities have waited for the railroads, and the railroads, doing a beggarly part of what they ought to have done, have been waiting for the business men and the towns and cities to do the balance. All of them have fallen far short of what they should have done. Here and there some community or State or railroad has spent a few thousand dollars and expected immediate results instead of carrying on a campaign where hundreds of thousands should be expended in the aggregate and continued year after year, not looking for two dollars today for the dollar spent yesterday, but realizing that in such a campaign as this the seed must be sown and months, and sometimes years perhaps, elapse before the full fruition of the crops can be gathered. Few, if any, of our people, railroad officers or business men generally have even dreamed of what could and should

be done. Their vision has been limited, and knowing little or nothing of what others are doing they have not realized their own pitiable shortcomings. Some few are waking up, but too many are sleeping.

#### SOUTHERN TECHNICAL TRAINING.

In an interview at New Orleans C. P. Young of the C. P. Young Engineering & Supply Co., Ltd., of that city, referring to the lack of expert mechanical skill among the young men of his section, is quoted as saying:

This is not because of any lack of energy or ability on their part, but it is brought about by a prejudice heretofore existing against a profession of that kind, and also because of lack of opportunities, as there are few technical colleges of note in the South.

Mr. Young has now several young men from New Orleans being educated in one of the Northern colleges, and says the reports from them are splendid. One has been advanced three times during the past few months. He refers to this as showing what Southern boys are capable of when given a chance. It is true that the South has no great technical schools such as the best in other sections, but it has a number that are doing good work and building up as rapidly as their States will provide the money needed. The demand for room at these schools is far ahead of their facilities, showing how eager Southern boys are for a technical education. President Winston of the North Carolina Agricultural and Mechanical College said a few weeks ago that if he had accommodations his school could have 2000 students next session instead of the 400 to 500 it now has. The same conditions exist in other Southern technical schools. The boys of the South are clamoring for the opportunity to fit themselves for the limitless industrial development ahead of this section. And as to inherent ability for technical work, there is no better material in the world than the Southern boy.

#### BIG CONTRACTING WORK AHEAD

Mr. O. G. Robinson, a Kansas City contractor, states a great truth when in an interview in the New Orleans States, discussing the development of the South, he says:

The trouble is the people who live here themselves do not realize what they have got.

In discussing business activity in the South and the outlook for the future Mr. Robinson, who is the head of the firm of Robinson, Cramey & Lionberger, says:

Never have I seen so much work of a heavy caliber attempted as is going on in the South at present. Big projects are being pushed to completion on every hand, and yet others are constantly springing up, and the result is that contractors are offered more work than they can do.

Since I have been in the city I have been invited to bid on several large undertakings, but there is little likelihood that I will, for my firm has its hands full at present; in fact, we cannot secure the labor we need to do work we have begun as fast as we would like.

We have the contract for building all the bridges on the line of the Baton Rouge, Hammond & Eastern Railroad from Baton Rouge to Covington. This will require 3,000,000 feet of lumber. It is all pile-trestle work. We have three pile-drivers at work and will have five going in a short time, and ultimately seven. It is hard to find skilled hands. We employ white labor exclusively on our bridge work, because bridge builders refuse to work with negroes.

We have opened up offices in Hammond and are increasing our working force as fast as possible, because it looks to us like a busy winter, and we want to help improve and develop the South as much as we can.

I constantly hear of all sorts of railroad ventures, and it looks as if the mileage of railroads in the South will be increased to a remarkable extent in the next few years. It takes money to do all this, but my own business connections and experiences show me that Northern capitalists are putting millions and millions into the South.

More railroads and the completion of drainage problems now under way will transform the South and make it even a more wonderful country than it now is. The trouble is the people who live here themselves do not realize what they have got.

Mr. Robinson has very clearly stated the situation. He sees something of the coming great development ahead of this section, the beginning of which we have had during the last few years. All that has been done is preliminary to the big work that is ahead of the South.

#### REFLECTING THE SOUTH'S GROWTH.

Growth and prosperity of the South are adequately reflected in the gross earnings of its various railroad companies, the reports of which, covering the fiscal year from July 1, 1906, to June 30, 1907, inclusive, are now in course of preparation. A glance at the figures as far as gathered (some of them being for a little less than the full year) is highly encouraging as to the future of this section, although the net earnings are not given to show the profits of the lines, which latter may be expected here and there to exhibit a smaller percentage of gain as compared with the gross owing to the higher cost of materials, supplies and labor. Nevertheless, the net gains are good. In the statements preliminary to the issuing of the full reports we find that the Southern Railway earned in gross during the year \$56,696,961, which is an increase of more than \$3,000,000 as compared with the preceding year, other comparisons herein being similarly made, regard being paid only to the corresponding period in cases where the year's earnings are not reported—say for later than May—in some instances. The Atlantic Coast Line shows, including May, \$24,674,423, which is a gain of nearly \$2,000,000 in 11 months. The Seaboard Air Line reports \$15,050,368 up to the end of May, or an increase of over \$1,100,000 for the same period. Chesapeake & Ohio shows \$23,366,176, which is almost \$1,000,000 greater for the first 11 months of the fiscal year, and Norfolk & Western reports \$28,412,994, a gain of more than \$2,000,000 in the same period. Central of Georgia shows \$12,210,548 for the year, or over \$800,000 increase.

The Louisville & Nashville Railroad reports \$48,264,810 gross for the 12 months, or an increase of more than \$5,250,000, while the Nashville, Chattanooga & St. Louis shows for 11 months \$11,124,675, which is over \$1,100,000 greater than for the same period of last year. Mobile & Ohio exhibits a total of \$10,744,963 for the year, which is an increase of nearly \$1,300,000, and Yazoo & Mississippi Valley displays gross of \$9,433,987, or more than three-quarters of a million growth. Texas & Pacific reports \$16,674,432 for the year, or over \$3,580,000 more than last year. The group of roads controlled by the Alabama, New Orleans & Texas & Pacific Junction Railways Co. (namely, the New Orleans & Northeastern, the Alabama & Vicksburg and the Vicksburg, Shreveport & Pacific lines) exhibit a total of \$6,472,182 for the year, or an increase of over \$785,000.

Roads lying mainly in the South, but partly in adjoining States, also display

liberal gains in gross earnings, the St. Louis Southwestern, for instance, reporting \$10,541,944 gross for the year, or a gain of \$1,592,695, while the Kansas City Southern, with a gross of \$9,284,882, exhibits a gain of \$1,531,903. Other lines having much trackage in the South, with considerable or a majority of mileage in adjacent territory, are similarly prosperous. Thus the St. Louis & San Francisco system for 11 months shows gross of \$45,809,927, or an increase of \$7,183,528. Illinois Central for the year has \$56,457,548, or over \$4,800,000 more this year. The Missouri Pacific system (including the Iron Mountain) has \$47,222,074 up to and including the third week in June, which is nearly \$4,000,000 more than in the same period ended a year ago, and Missouri, Kansas & Texas, with gross of \$21,183,954 for the year, has the fine gain of over \$5,000,000.

While these figures do not cover all of the railroads in the South, they are nevertheless sufficiently typical to afford an accurate estimate of agricultural, industrial and commercial progress throughout this section and to present a reliable basis for just expectations of at least an equal average percentage of growth during the fiscal year that has just begun.

#### CAPITAL FROM EUROPE.

United States Consul-General H. B. Miller, writing from Yokohama, refers to the report that a French syndicate has been organized to invest \$50,000,000 in the Orient, mainly in Japan, in the development of industrial interests and in furnishing cheap money to Japanese business concerns of good standing. It is intimated that with French capitalists now assured of the safety of their investments by the Franco-Japanese agreement, the amount of money to be thus invested will probably be largely increased.

This suggests how important it is for the South to seek to draw capital from Europe, especially France, where there is a vast annual surplus of accumulated wealth seeking investment outside. It has been estimated that France annually invests \$500,000,000 in securities outside of that country. For many years much of this has gone into Russian securities, but with that field less attractive than formerly, this surplus money ought to be drawn to the South. There is likewise a great opportunity for drawing capital from England and other European countries, and it well behooves the people of the South to surround the investment of outside capital in their section with such safeguards as to make every investor feel that he will have every possible protection which the law can afford as to the security of his money.

#### WHAT ONE MAN DID.

What one man of imagination and indomitable energy may accomplish was emphasized in the recent celebration at Gulfport by citizens of South Mississippi of the assumption by the United States Government of the control and maintenance of Gulfport harbor and, in that connection, the tribute paid to Capt. J. T. Jones, the creator of Gulfport and of the Gulf and Ship Island Railroad, opening up to manufacturing and agriculture a productive stretch of country between the capital of the State and the coast. The work of dredging a harbor and a deep-water channel therefrom was begun six years ago. Its completion is a triumph of the faith of one man in the future of Gulfport as a terminus for a developing

and State enriching railroad line. The original plan was to make the eight-mile long channel 300 feet wide and 19 feet deep, but it was turned over to the Government 310 feet wide at the bottom and from 23 to 24 feet deep. The whole work in the harbor and channel, promoted by individual enterprise, cost \$2,100,000, the Gulf & Ship Island Railroad cost \$15,000,000, including rolling stock, shops and depots, and of that sum \$572,799 was spent for additions and improvements in the 11 months from July 1, 1906, to May 31, 1907. The road, with its branches, is 310 miles long, and it has about 100 miles of side tracks and switches. There are now 170 sawmills tributary to Gulfport with an annual payroll of \$5,320,000 and a yearly capacity of 1,563,330,000 feet, of which 293,126,000 have moved in one year through Gulfport. Many canneries and other industries have sprung up along the road, and the cutover lands are being occupied for diversified farming. It is no wonder that Captain Jones has a loving cup from citizens of South Mississippi.

#### IMMIGRANTS FOR VIRGINIA.

At a meeting last week of the joint committee on immigration at Norfolk and officials of various railroad lines touching at that point, preliminary steps were taken toward securing cargoes for export in order to assure the stopping at Norfolk of vessels engaged in the immigration traffic. There is no doubt that Virginia needs immigrants and that proper encouragement will add to the number arriving in that State. Hon. G. W. Koener, State Commissioner of Immigration, stated in the meeting that while Virginia's appropriation for the purpose was entirely too small, he had, nevertheless, located about 200 persons, and has about 200 more in prospect between now and January 1. He said that lands in Virginia could be bought for much less than the people of Scotland and of Northern England paid in annual rent. The railroad representatives mentioned the difficulties in the way, but Mr. Walter Sharp of Abbott Morris & Co., who has been active in development in the Norfolk section, pointed out that there had been far greater difficulties in the past, but that now the need of immigrants was greater, the railroads more extended and the country better developed, and that this made it possible to furnish return cargoes where such a plan could not have succeeded in the past. He also dwelt upon the fact that the call for immigrants came not alone from the factory and the farm, but also from the home. It was arranged that Commissioner Koener should accompany the committee of Norfolk business men and railroad representatives to New York early this month to confer with the steamship lines.

#### THE COTTON MOVEMENT.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during 329 days of the present season was 13,330,612 bales, an increase over the same period last year of 2,400,818 bales. The exports were 8,320,488 bales, an increase of 1,937,923 bales. The takings were, by Northern spinners, 2,526,122 bales, an increase of 170,037; by Southern spinners, 2,374,353 bales, an increase of 130,825 bales.

#### NAKED.

It is interesting to note how the North Carolina situation has induced paresis in the literary campaign, ably manipulated from New York, in alleged advocacy of a Southern candidate for the Presidency in 1908. The campaigners evidently imagine, in fear and trembling, that a Southern candidate may actually be evolved.



## SAN FRANCISCO: TYPE OF AMERICAN VIGOR.

[Believing that a review of the wonderful development of the Pacific Coast, brought about mainly by the broad enterprise and energy of its people, would prove an inspiration not only to the South, but to the whole country, the Manufacturers' Record has sent its special correspondent, Mr. Phenix, to that section to study and write about the causes which have created its great prosperity.—Ed. Manufacturers' Record.]

[Special Correspondence Manufacturers' Record.]

San Francisco, July 25.

"What's the matter with San Francisco?" While "She's all right" is far from the proper answer, yet with all the desolation and the disorder a true picture of the San Francisco of today must include the undaunted courage and the capacity for achievement that have marked the city from its very birth.

While America and all the world would rightly wish that unlovely spots were absent from the picture, yet, as is the view of many observers, there is danger that the public eye will fail to distinguish true values, the proper proportions of the figures and the groups upon the canvas, so that while much discussion and great clamor are now centered around a few seemingly important details, with a better focus or a proper distance much that is most prominent today would, it is submitted, sink into insignificance and there would stand out in bold relief the dominating features, those that really give character to the composition and that will fix its place throughout all time.

That San Francisco is "all right" today no optimism can assert; but that conditions warrant all the pessimism that so freely flows forth from every sort of editorial sanctum the world over, and even including San Francisco, facts in abundance may be marshaled to deny. In the very spotlight of the stage just now San Francisco's every act is held up for inspection and discussion in a manner no other city has ever experienced heretofore, and what has occurred and is occurring here is taken as the text for more moralizing and theorizing than has been given to almost any other event since the Roman Empire fell.

Because on these shores of the lordly San Francisco bay it is inexorably decreed that there shall be one of the great cities of the world; because the development of this State, this nation and of all the countries that border on every part of the Pacific ocean would build a vast mart of commerce here were every dollar of present investment utterly destroyed and the city's site reduced to the barren and unpeopled sand dunes which marked its primitive state, it is worth while to attempt an analysis of the conditions that really do obtain; to take stock, as it were, and determine what the salvage is; to note the flotsam and the jetsam and to undertake a true appraisal of the value of all the elements that enter into the present condition of affairs.

There is abundant reason for the difficulty of this task, for in the wide divergence of opinion that exists almost everyone who writes or talks about the subject views the situation from a differing angle. The keynote of the situation is the intense individualism that distinguishes this place. There is no "team work" here, and, except sporadically, there never has been. Individuals have achieved wondrously, and the aggregate of their achievements has not only created a mighty city here, but has left an impress on the nation and the world.

Following as an inevitable sequence, San Francisco has been individualistic as a city, so that nowhere in the world has there been a more self-contained center, independent of every other place, even to the matter of finance. Heretofore it has always been the part of San Francisco to bestow, never to receive. With an independent city and with independence of individual action, there has been so great an indifference to outside opinion that no line of action was ever taken with reference to what might be thought by others of that course. Thus the individual, self-reliant and independent, knew no occasion to look to some stronger leader for inspiration and guidance. It was a case of every fellow for himself, and what with lifting millions from a single ore shaft, as happened in a hundred cases or more, and with the abounding prosperity that came to every sort of individual effort, the need of combination was never felt, for the city grew and thrived on the sheer force of what the individual achieved.

That these conditions will ever be wholly changed is altogether unlikely, for San Francisco can hardly put aside the habits of her nearly 60 years' existence and adopt the methods of communities whose prosperity depends on a combination of numerous separate factors. It is readily apparent that nothing would be more advantageous to San Francisco at this moment than a getting together for such team work to handle labor troubles, municipal politics and reconstruction as belongs to Los Angeles. But nothing is farther from the probabilities than such a coalition. In the first place, this is not a homogeneous population, but an extremely cosmopolitan one, and in addition to lifetime habits of individual action, the same forces that have made the San Francisco of the past are relied on to rebuild not only that San Francisco, but a city of vastly greater importance.

Merely looking at the surface the observer is disheartened by the conditions here today. In no part of the four square miles burned over by the fire of April, 1906, has complete rehabilitation been effected. There are ruins still in almost every one of the 497 squares within the area, which included practically all the banking, wholesale, retail and hotel districts of the city and a large part of the residence section, with a total of 27,000 buildings destroyed. The streets are dust-covered and unreconstructed; the labor unions are still recalcitrant and rampant; there is no co-operation, for every movement in that direction is assailed, and no effective leader escapes the pillory. The daily newspapers do not agree on either men or measures, and there is no rallying point, not even the prosecution of the "grafters," which is regarded by many wholly unimpeachable citizens to be tainted by motives of self-exploitation and personal aggrandizement.

In a community that relies on concerted action for the accomplishment of any great purpose, such a state of affairs as is found here today would be perplexing to the point of paralysis. That San Francisco is not paralyzed, is hardly even disconcerted, is the wonder of the situation and possibly the promise that the problem will be solved. It might almost be said that San Francisco is serene. And what greater tribute to the courage of a virile, sensient people could be bestowed? Comes an earthquake with fire, driving 200,000 or 300,000 homeless people into the streets and causing anywhere this side of \$1,000,000,000 loss—no one ever has computed the exact cost or ever will—as soon as the first shock is over and before the fire has half

burned out, with the family camping in the park and cooking in the street, the San Franciscan plans for temporary business headquarters and the business activities of the day and knows that his town will be rebuilt. Nor striking hordes, nor riotous fiends, nor boodling officials disturb his serenity and his faith. The strikers win—or lose—and the bank clearings increase. The rioters are indicted—or escape arrest—and the savings in the banks are greater than ever known. Insurance money comes in as a flood—\$180,000,000 or so of it. There are diamonds for the family, restaurant dinners as of yore, and business and rebuilding gets a convenient share. The spring will not run dry. A boodling Mayor goes to jail; a splendid citizen finally takes his place. It is all in the day's work, for it isn't in the stars that San Francisco can lose.

And, from this point of view, this attitude does not come from any mere happy-go-lucky recklessness or indifference to fate. It is because the San Franciscan knows what is behind him, knows of the rock whereon he stands, that he simply smiles and keeps on his old gait. He has confidence in himself, for he has tried himself out. He has confidence in his city and in his State, for he knows a vigorous people are developing their resources and he knows what they will do. He may have to go out into the markets of the world to borrow money for a while, which is a strange experience and an awkward predicament for him, but he knows that the wealth of an empire will continue to flow into San Francisco's lap and that abounding prosperity will never depart from these shores.

The products of the mine, the forest, the field and the farm in California are bringing around \$450,000,000 of new money every year, and San Francisco is the financial center not only of the State, but of all the coast from Alaska to Peru, and of the Hawaiian Islands, too. Lumber, gold and oil will indefinitely maintain their present share in the prosperity of the State, and then the fertile fields, the orchards and the vines, increasing in area and wealth production every year and already contributing half as much as is ordinarily received for the wheat crop of the United States, will be a horn of plenty evermore.

The clearing-house for a State which is being so rapidly and so extensively developed in any line, and the greatest seaport on the largest of all the oceans, it takes more than an earthquake or a fire to shake the faith of these people in the least. Six thousand permanent new buildings have been completed since the fire and 3000 more are under way. The total valuation given when the permits were taken out was \$73,500,000. Steel construction and reinforced concrete are being used in practically every building of size and importance. As in Baltimore after the fire, business men are housed all over town, and many temporary buildings have been put up on a permit requiring their removal on 90 days' notice. The permanent new structures are being built to stand earthquakes and to resist fires, although the theory is that the earth has settled into shape to last 100 years or so. There were no reinforced concrete buildings of any size in San Francisco before the earthquake and fire, and the two dozen or so lofty structures that came through with only partial loss were of steel construction. Among the new buildings, however, is an 18-story reinforced concrete structure, and this form of construction is being very generally used. There is great building activity all over the burned district, although the rush has subsided since the first necessity for immediate requirements was met. In the earlier months after the fire the demand for buildings was followed by a jump in prices for materials that caused some owners to curtail their plans and to stop temporarily in some instances with fewer stories than will ultimately be built on. High materials and the scarcity of mechanics brought about a high scale of wages, which also operated to defer some construction. The situation has been adjusting itself since then, and there has been a considerable reduction in the prices of materials and in labor.

Before the fire San Francisco had no indebtedness in the East. Real estate was mortgaged only to the extent of about 11 per cent., and these mortgages were all held by California capitalists and institutions, nearly all of whom were of San Francisco. It was even the habit of San Francisco merchants to discount their bills, and no financial connections had thus been established with the East. Following the fire a New York insurance company sent a representative here prepared to loan \$5,000,000 at 5 per cent. As real estate loans had been made here at 4 to 4½, he received no bids. There was little demand for money at any price for a while, San Francisco actually sending some \$30,000,000 to the East to be loaned on call during the summer of 1906.

This spring money has been more tight, and the supply of local money having been exhausted by the abnormal demands made on it, San Francisco has for the first time in its history turned to the East for money. Those who have had good security and were prepared to meet the rates of the market have been accommodated. Many millions of Eastern and European money is being negotiated for at this time, as San Francisco finds outside funds will be required for some years to come before complete rehabilitation has been accomplished.

There has been no slump of consequence in the value of inside real estate since the fire, and it is declared there will be none. In the choice business section men with large means of here and elsewhere have been looking for "snaps," but in vain. Owners prefer to hold on rather than sacrifice, if willing to sell at all. The large estates, like Sharon's, Crocker's, etc., have not only held on, but are putting in more costly improvements than before. The Sharons are to spend \$4,000,000 or so on the new Palace, and, in addition to enlarging the restored St. Francis by a third, the Crockers are making numerous other improvements throughout the city. The Laws rebuilt the Fairmont in record time at a cost of \$2,000,000, and all over the city big holdings are being improved as a rule.

This as to the faith and the works of the San Francisco people.

Their financial condition is shown in the fact that the imports and exports for 1906 were nearly \$100,000,000, which was \$9,800,000 increase over those of 1900. The bank clearings for 1906 were nearly \$2,000,000,000, a 9 per cent. increase over those of 1905, and the bank deposits today \$225,800,000. The deposits in the savings and commercial banks amount to \$13,000,000 more than before the fire. There are in the savings banks \$157,738,812, according to figures furnished by the California Promotion Committee, and the most liberal estimate of present population here is not over 450,000. This means an average of \$350 a head for every man, woman or child of every description within the corporate limits. If this is not a record-breaking average it is well to the front. I found not so much per head anywhere in New England two years ago. When the wage-workers save like this, can the situation be all bad?

One of the savings banks here has deposits of \$55,000,000, with a limit to each

account of \$3000. The Old Bowery Bank of New York made quite a to-do over it when the deposits reached the \$100,000,000 mark a few days ago, and a telegram about it went all over the country. I had to hunt for the facts about the San Francisco bank, so much do they take big things here as a matter of course.

After the earthquake and the fire many sage prophets declared San Francisco never would be rebuilt; that it just couldn't be financed, even if its site wasn't permanently deserted. On top of the Spanish-American War, the Boer War, the Galveston flood, the Russo-Japanese War, the Baltimore fire and a few others, it certainly did seem like a breaking strain would be put upon the financial fabric of the country and the world. After the horrors of that climactic stroke the wonder is that these people ever held together at all, and that progress has been made is marvelous indeed.

There is much to be straightened out in every way. Anybody can see that. And being so apparent, must it not come to pass? That San Francisco will be rebuilt before so many years, and better and greater than before, is believed everywhere. The old, unconquerable spirit will prevail, it is felt, so that the San Francisco of tomorrow will be a far greater credit to her people and the nation than ever was the old one in the past.

ALBERT PHENIS.

P. S.—In this optimistic opinion of conditions here there are many, as mentioned hereinbefore, who do not coincide. Some of the contrary views are pessimistic in the extreme, especially based on the power organized labor has become in this community and the use it is making of that power. I will attempt to reflect that view of the situation in another letter later on.

A. P.

## THE AUTOMOBILE AGE.

### Exemplification of Its Special Industrial Significance.

From the experimental stage to that of practicability, in inventive genius displayed, in extended use and in wonderful results, the history of mechanics and invention records few equals to the marvelous achievements of the automobile industry. Ten years ago largely a curiosity, today found in most every section and clime of the globe, the automobile's is a record of a success which would be almost beyond conception if we had not on every hand daily evidences of it. In city and country, for both pleasure and business, the automobile is found in ever-increasing numbers, and so necessary a part of the daily commercial life has it become that its loss would now almost be considered a calamity. Although many different types are now manufactured by as many different concerns, the industry may be said to be still in its infancy, and it would be hardly an exaggeration to expect the next 10 years to record even greater advances toward its more practical perfection than those made in the past. Every part of the automobile is being constantly studied by men who have devoted their every interest to it, and new departures are frequently announced which tend to produce greater efficiency, lessen danger, to make it still more practical and to broaden its general usage.

A glance backward through the history of the development of the automobile discloses the fact that the perfection of self-propelled vehicles has for years been the aim and dream of many men of inventive minds, and many experimental machines were constructed along various lines, only to turn out as failures. These experiments were persistently continued, however, despite the many failures experienced, but it was not until about 1885-89 that the first practical features as indicated in the machines of today were hit upon. This consisted of a patent covering a high-speed gas or mineral spirit engine granted to Gottlieb Daimler, who is now popularly known as the father of the automobile of today. It was also about this time that Carl Benz patented and constructed his first gasoline tricycle. Then followed in rapid succession inventions and improvements by several French engineers, including Panhard, Peugeot, De Dion and Mors, who, next to Daimler himself, were the most important factors in outlining and putting into practical uses the fundamental principles of the modern automobile. In 1889 Leon Serpollett invented his famous instantaneous or flash generator, which was the most important agent in bringing the steam engine into consideration. A few years later the electric automobile came into prominence and assumed

practical proportions and permanency about 1893-94. The subsequent development of the three classes of motive power now generally used—gasoline, steam and electricity—has represented an interesting and successful series of brilliant inventions and improvements. Then, too, has followed the perfection of numerous indispensable parts of the automobile, thus opening up a wide field and bringing into existence new industries by the score.

Those who are interested not so much in the automobile particularly, but who like to follow up the wonderful expansion of modern industries, will be surprised, in studying the advertising pages of any of the leading periodicals devoted to the automobile industry, at the array of articles advertised, of many of which they have never heard. Here they will find displayed not only machines made by a large number of manufacturers in various parts of the United States, but also a vast quantity of parts and accessories which are essential to the operation of the machine and to the comfort of the occupants.

One of these periodicals of recent issue contained the advertisements of about 100 manufacturers of automobiles and about 250 others who make parts and accessories. These many manufacturers, and these are not all in this country, indicate not only the growing popularity of the automobile, but also the study that has been given to it to enable so many different ones to place machines on the market, each of which has its own peculiar features, so as not to conflict with another or infringe on individual patents. The various cars advertised ranged in price all the way from \$500 and \$600 up to \$5000 and \$6000, and included those devoted to pleasure, to speed and to commercial uses.

Although primarily brought out as a pleasure vehicle, the rapidity with which the automobile is being adapted to commercial usages is especially noteworthy, and it is now no uncommon sight to see commercial self-propelled vehicles of all sorts in all parts of the country. The advertisements in the periodical referred to show delivery wagons of various kinds, large trucks for handling the heaviest articles, sightseeing automobiles, police patrols and others particularly designed for some specific commercial purpose. Truly the "passing of the horse," often referred to in a humorous vein, seemed destined to come to pass, and it would be no wild prediction to say that within the next 10 years he will be superseded to a great extent by the self-propelled vehicle for commercial use.

Another interesting phase disclosed by these advertisements is the large number of correlated industries which have sprung into existence entirely through the practical development of the automobile. Among these may be mentioned those de-

voted to the manufacture of bodies and tops; tires and all sorts of tire tools; meters and gauges of all kinds; lamps, wind shields, horns, goggles, wearing apparel and trunks and baskets, all devoted to the comfort of the owner; portable garages; various mechanical contrivances, each of which has its important part in the completed machine, and many others far too numerous to name; in fact, these companies manufacture all of the small parts and accessories which are either necessary to the proper operation of the machine or which add to the comfort and convenience of the operator and occupants. Many of these parts are so small and so far removed from the actual construction of the automobile proper that the cost would be far too great for the automobile manufacturer to make them, and this has led to the establishment of factories devoted particularly to these various lines, which are turned out in quantities. As the automobile is further advanced in development these accessories are also being added to, and the field is consequently being enlarged all the time and new industries springing up.

A consideration of the facts suggested by these advertisements gives an idea of the wonderful possibilities of how industries can be built up and enlarged in modern times, especially so when it is remembered that all other lines of manufacture and scientific research are also constantly being broadened and added to by new inventions and discoveries, so that many of the essentials necessary to put on the market a new invention are always at hand. Briefly speaking, among these may be classed the economical production of power, as evidenced in water-power development; the present broad development of raw materials fields, as seen in all parts of the country; the perfection of machinery and tools necessary to most every line of manufacture, and the wide field that is always open to the mechanical genius who can perfect some article or implement which will overcome or improve any of the existing drawbacks in a wide range of industries.

Aside from the building up of a wonderful industry, the automobile has had a wide influence in other lines, but particularly in that of improving the country's roadways and along educational lines. The life of any machine is considerably lengthened by good roads, and it has usually followed that as they have come into general use in any community better roadways have been provided or steps have been taken for their improvement. Bridges have also been constructed and traveling for the public generally has been greatly improved. As an educational factor the automobile has an important place. It has greatly increased the average range of intercommunication and brought many cities and towns in close connection with one another, and this has consequently had a wholesome effect upon enlarging the field of business enterprises. Not only this, but it has imparted a wider knowledge of the country generally, and those who take short or extended tours have had their eyes opened and their minds broadened by the many scenes witnessed of modern development with which they have come in contact and of which before many of them had no idea whatever.

Neither is the use of the automobile confined to those living in cities. The farmer is becoming more and more a user of the automobile, and in addition to using it for traveling purposes cases have been cited where by raising the machine from the ground the motive power has been successfully employed for sawing wood, threshing grain and other similar work.

The most startling fact, however, noticed concerning the automobile industry is that of the thousands of machines

turned out annually, there is not a single factory for their manufacture located in the South, all of the factories being either in the North or West. This fact, too, is all the more startling when it is considered that the South possesses many of the advantages sought for in the establishment of large industrial enterprises. With its vast amount of developed and undeveloped water-power, its resources of much of the material needed for the manufacture of most every article made, its many excellent locations either on tidewater or inland, where every encouragement is given to industries, the South is an ideal manufacturing location, and any exhaustive investigations made by those about to establish an industry of this or any other character will convince the promoters that the advantages to be secured in a Southern location will at the very beginning give them that important advantage so necessary in keen competition—economical production.

## WATER-POWER DEVELOPMENT.

### Advantages for Industry in South Carolina Towns

[Special Cor. Manufacturers' Record.]

Anderson, S. C., July 27.

The city of Anderson is now spending \$79,000 in putting down granolithic pavements and paving certain streets with vitrified brick. This is the second bond issue for street improvements. The principal business streets have been paved for several years. Within a year granolithic pavements will extend in all directions from the center of the city.

Anderson is to have another steam laundry within the next 90 days. The enterprise is being pushed by Mr. V. Motte Barnes. The plant is to be equipped with the latest improved machinery for doing all kinds of laundry work, including laundering for families.

Preliminary work for the development of Cherokee Falls and Calhoun Falls on the Savannah river 30 miles below Anderson has been begun by the Savannah River Power Co., and within 60 days close to 1000 hands will be actively engaged at this work. These falls will develop, respectively, 10,000 and 30,000 electrical power. Both falls are within two and a half miles of the town of Calhoun Falls, situated 32 miles south of Anderson. The Seaboard Air Line and Atlantic Coast Line Railway systems cross at the town of Calhoun Falls, running, respectively, northeast and north and south.

The town is surrounded by some of the finest farming sections of the South, producing splendid crops of cotton, corn and oats and good wheat crops. At the town has been built a 25,000-spindle cotton mill. The mill is completed, machinery is being placed and operation will begin in October. The town is growing rapidly. It now has two churches, two schoolhouses, a \$15,000 hotel, six stores doing a profitable business, a number of beautiful cottages, and several storerooms and dwellings are in course of erection.

A contract has been closed by Judge W. F. Cox, president of the Calhoun Falls Mill and president of the Calhoun Falls Investment Co., with the Savannah Power Co. to furnish from a plant at Gregg's Shoals, seven miles distant, which is now in operation, electric power not only to operate the mill, but to light the town of Calhoun Falls—the streets, the stores and the dwellings.

There is a considerable demand for real estate in the city of Anderson, and also at the town of Calhoun Falls. In addition to city and town property at these two places, there is an unusual demand for farming lands, which are regarded as the most productive of the Piedmont Cotton Belt of the South.



## FIFTY YEARS IN THE FAIRMONT COAL FIELD.

[Special Correspondence Manufacturers' Record.]

Fairmont, W. Va., July 27.

Having been the cradle in which the commercial coal production of the State was rocked, it is both natural and fitting that this city should become the most important place of intimate connection with that industry in its stalwart maturity. Just as it was fitting that James Otis Watson, the first producer of commercial coal in what is now West Virginia, should live to see the business concern founded and fostered by him grow to be the most important single producer of coal in the State of his birth.

Soon after the Baltimore & Ohio Railroad had fought its way through forest and mountain gorge to the town of Fairmont, thus furnishing such connection with Eastern markets as made the shipping of heavy freights practicable, James Otis Watson, as the active partner in the firm of Pierpont & Watson, the senior member of which afterwards became famous as the "Father of West Virginia," opened up a coal mine within the present limits of this city, and in July, 1854, made the first shipment of coal from the present limits of the State. The mine was a small, primitive affair, and the company's entire holdings amounted to 14 acres of land. From that small beginning the business has grown until now the legitimate successor of that undertaking, the Fairmont Coal Co., has more than 50 operations thoroughly up to date in equipment, owns the coal in 60,000 acres of land and produces each year what it would have taken that first mine 200 years to produce.

In the beginning the effort to market a new and unknown coal in large quantities was met with numerous obstacles and discouragements and attended with many annoyances and frequent losses. The wealthy operators in fields already opened up, furnishing coals whose quality was already established as a standard, were not willing to see the product of a new field come in and divide their markets without a struggle to maintain their own supremacy and retain their profits unshared with others. They sneered at the efforts of the promoters of the new field, discounted the quality of their offerings and threw in their way every possible obstruction. But those who reckoned upon stifling the efforts of James Otis Watson, without actually stifling the breath of him, did so in ignorance of the character of the man. The stern Scotch spirit was awakened to its best efforts by opposition, kindled into an unquenchable blaze by obstacles that to others would have brought discouragement and ruin. He invited a trial of his coal, guaranteed its worth and demonstrated its value in every market possible to be reached, and finally by sheer force of personal effort established it among the standard coals of the fuel-consuming world.

Having won his place in the markets, the next thing necessary was to secure reliable tonnage and reasonable freight rates from the Baltimore & Ohio Railroad, then, as now, the only outlet from this field. The same overmastering will displayed in fighting opposition from other coal producers, the same indomitable perseverance, coupled with a high degree of diplomacy, succeeded in bringing about satisfactory arrangements with the railroad company, and for many years the produce of Mr. Watson's mines and those of the great company which is its legitimate offspring have been furnished transportation facilities unsurpassed by those of any other coal-producing concern of the country.

Thus this sturdy pioneer went forward, overcoming difficulties as he encountered

them, beating down obstacles as they arose in his path, adding to his operations by little and little, until finally the opportunity arrived of combining in one company and under one management practically all the coal operations in what has come to be known as the Fairmont field. This occurred in 1901, and a year later, having seen the fruition of the hopes of his youth come to crown the years of his age, James Otis Watson passed away at the age of 86, leaving his great interests to be administered by the able hands of his son, trained to the business.

The progress made by Mr. Watson was for a good many years very slow, but by keeping everlastingly at it he made advancement year by year. In 1874 he organized a stock company, of which he was the principal owner and the manager, and opened up the Gaston mines. In 1886 the Montana Coal & Coke Co. was formed and the large Montana plant was established on the Fairmont and Morgantown branch of the Baltimore & Ohio road. This was the starting-point of really modern methods of mining in this field, for here were installed all the latest improvements in mining machinery and equipment. This was followed by the acquirement of new properties and the opening of new mines from time to time, as widening markets demanded and increased financial ability permitted, until scores of mines and many thousands of acres of coal-bearing lands had been brought under one control.

James Otis Watson was the father of three stalwart sons, S. L., J. E. and C. W. Watson, and these, as they grew to manhood, became associated with him in his business. They proved towers of strength to the father when age began to sap the strength of the body, the ardor of whose spirit it could not cool. Learning the business "from the ground up," they early began to realize the economy in production to be secured by a combination of many operations, and it was chiefly through their efforts that the great aggregation of mines now running under one directing head was effected.

Meantime other men had come into this field and begun the operation of mines, helping to extend the fame of the product and broaden its market, and the great value of the coal-bearing lands was thoroughly demonstrated. When Hon. A. B. Fleming, connected with the Watsons by marriage ties and business relations, quit the office of Governor in 1893 he began to take an active interest in the development of the coal industry, and soon made his influence largely felt. He secured options upon a large body of coal lying on the west fork of the Monongahela river between Fairmont and Clarksburg, and sought to use them as an incentive to somebody with money to build a railroad between the two cities. He finally interested Senator J. N. Camden of Parkersburg, who took over the coal optioned and built the road, now known as the Monongahela River division of the Baltimore & Ohio. Senator Camden at once began to develop his holdings, and at Monongah, on the new road, halfway between Fairmont and Clarksburg, established a number of operations of thoroughly modern equipment and large productive capacity. Here was built a town of considerable size and importance, with business blocks, churches, schools, public buildings, water-works and electric-light plants and most of the other conveniences of modern city life. Other interests established other plants, and by the time the present century had dawned the Fairmont coal field was represented in the world of production by something like 50 mines,

less than half of which belonged to the Watson interests.

Then it was that the genius of the younger Watsons began to make itself felt in the organization. Having demonstrated the fact that there was economy in combination for the production of coal, they now determined to show that there was still greater economy to be brought about by combination in the selling of coal. They therefore in 1900 organized the Fairmont Coal Mining Co., whose object it was to act as selling agency for the entire product of the Fairmont field, the procuring of better transportation facilities, better means of handling and distributing coal at tidewater, on the lakes and in the various cities of the country, and increasing the profits of the business by a general systematizing of methods. Thus the selling of a large majority of the output of the field was concentrated in the hands of one concern. This plan worked well, and for the year of its life the results produced by the Fairmont Coal Mining Co. proved eminently satisfactory. But its chief result was in demonstrating the theories of the younger Watsons with respect to combination. They had been raised in the coal business. They felt that they knew it as a child knows his vernacular. They believed that practical knowledge gave them an advantage in the operation of mines that would enable them to take those that had proved unprofitable in hands less capable and make them show a profit, while those already profitable could be made to yield still more satisfactory dividends under their management. With this idea in mind they set about a still further consolidation of interests, the bringing of still more operations under one management. In 1901 they organized the Fairmont Coal Co., with \$12,000,000 capital stock, and this company, beginning business on July 1 of that year, took over the Camden holdings, with the big operations at Monongah, carrying 3000 acres of surface and 25,000 acres of coal in the surrounding section; the Clark interests, with four going mines and 2000 acres of coal; the Hutchinson holdings, comprising the plants at Meadow Brook, Ehlen Melrose, Worthington, Luther, Lynch and Reynoldsville; the Mudlick field, comprising 3000 acres of undeveloped territory, and numerous other plants and tracts.

By this consolidation the Fairmont Coal Co. came into possession of more than 50 mines and a number of entire towns, covering many square miles of territory. These properties are situated in the counties of Marion, Monongalia, Harrison, Lewis and Taylor, extending from Fairmont north toward Morgantown, south toward Clarksburg and Weston and west toward Mannington. The company now has 61,000 acres of coal, 5000 acres of surface and 51 running mines. The output for the year 1906 was 5,700,000 gross tons, and for the first half of the present year the production reached 2,900,000 tons. This means for the entire 12 months of the present year the output will reach about 6,000,000 tons.

The application of up-to-date methods in producing and disposing of coal having been vindicated by each successive step taken, the organizers and managers of the Fairmont Coal Co. went still further in the business of combination and enlargement. In October, 1901, they organized the Clarksburg Fuel Co., in 1903 the Pittsburg & Fairmont Fuel Co., and in 1905 the Southern Coal & Transportation Co., all of which are conducted under the same general head. Early in 1903 control of the Consolidation Coal Co. of Baltimore was acquired by the Watson interests, thus consummating the most important step taken by them since the formation of the Fairmont Coal Co. The Consolidation

Coal Co. was and is the owner of a number of mines of large productive capacity in the George's Creek region in Maryland, and also owner of a majority of the stock in the Somerset Coal Co., operating largely in Somerset county, Pennsylvania. With the passage of the control of the Consolidation Coal Co. to the Watsons a controlling interest in the Fairmont Coal Co. was secured to the Consolidation Coal Co., so that the latter now owns the George's Creek operations and a controlling interest in both the Somerset Coal Co. and the Fairmont Coal Co. and its affiliated concerns, the Clarksburg Fuel Co., the Pittsburg & Fairmont Fuel Co. and the Southern Coal & Transportation Co.

The welding together of these interests was in a number of particulars a triumph of business acumen little short of genius, but in no feature stronger than in that of providing greater facilities for marketing. It is a common saying among coal men that "anybody can get out coal, but it takes a man to sell it." That is the special province of the Consolidation Company in this new combination, and there it shines.

The Consolidation Coal Co. owns piers, docks and wharves in the harbors of Baltimore, Boston and New York, together with lighterage plants, hoisting machinery, ships, tugs, barges, towboats, lighters, floating bunkering machines, receiving pockets, storage bins, horses and wagons sufficient to transport, store and distribute millions of tons annually. The Fairmont Coal Co. on its part controls the Northwestern Fuel Co., with its principal offices in St. Paul, Minn., which acts as selling agent for the combination in the Northwestern territory. This company has docks at Duluth, Superior, Washburn and Milwaukee, and docking arrangements at Lorain and Sandusky. These docks enable the company to store large quantities of coal and to have it ready for immediate delivery to the trade throughout the great Northwest. The Fairmont Coal Co. also has six extensive retail yards conveniently located in the city of Cincinnati, where customers are supplied by the company's own teams. Another possession of the Fairmont Coal Co. which added great strength to the combination is a railroad equipment of 7000 coal cars, purchased by it to insure sufficient tonnage throughout the year. The Somerset Coal Co. also has cars to the number of 1000.

All these facilities for the prompt and economical handling of coal were thrown into "hotch-potch" by the combination of the various companies, giving each the advantages of all and enabling them to meet on at least equal terms their most powerful and most favored competitors.

But to return to the Fairmont region, where the heart of this combination beats. Here under one roof, and in offices that cover an acre of floor space, are the working offices of the whole combination—the operating department, the engineering department, the auditing department, the purchasing department, the power and mechanical department, the construction department, the legal department. From these offices every detail of operation in every mine is outlined and directed, the general manager and general superintendent being constantly in direct touch with the local superintendents throughout the entire field. From here the closest watch is kept upon all the mechanical appliances in all the mines, and a keen lookout as well for anything new in the way of mechanical equipment, to the end that the company may obtain the benefit of all the latest improvements in the way of economical production. From here the chief engineer's eye is kept upon all the underground work, which is kept going all the time in the most scientific manner. Not

an entry is driven, not a room cut out, not a pillar pulled, not an air course laid, not at brattice built but at the direction of the engineering department, where more than 50 engineers, draughtsmen and field men are constantly employed in giving intelligent direction to the work. At stated periods each mine is surveyed and the work planned, and the superintendent furnished with a blueprint presenting a perfect picture of the inside of his mine, showing what has been worked out and what course the work must now take. All this adds to the efficiency of the working force, the economy of collecting and delivering the coal to the mouth of the mine. If a new tippie is to be constructed or a new building erected the plans are made in the construction department here and the new structure put up in accordance with them. At the company's New England mine, lying just outside the city limits, is maintained a large and well-equipped electrical repair shop, to which comes from every mine in the combination any piece of electrical machinery that needs repair. In this way work of such character is done in the most thorough and at the same time economical manner. These things are mentioned here simply to illustrate the system that obtains throughout the whole organization, and as a hint at the economies that have been introduced.

A strong feature of the management of the Fairmont Coal Co.'s business, and one that has enabled it to keep its mines going when other sections were suffering from strikes and other labor troubles, is the consideration it gives its employees. In addition to paying wages that make it possible for the industrious and saving workman to accumulate money, this company has always taken an interest in the physical welfare of the miners and their families, an interest that finds expression in the building of excellent houses for their residence, and in furnishing all the comforts and conveniences possible for their enjoyment. The mining town of Enterprise, while not the model, may be taken as an illustration of this point. It is systematically laid off, compactly built, and contains every element contributing to the welfare of the inhabitants. The houses are of two kinds, double and single. They have stone or brick foundations, and each contains three or four rooms conveniently arranged and finished with hard plaster. They are fitted with inside closets, bathrooms with hot and cold water, sewer connections and electric lights. The fences and foundations are frequently white-washed, unhealthful garbage is not allowed to accumulate, the streets are kept clean, and everything possible is done to preserve the most sanitary conditions. A large store is maintained here by the company, from which employees may buy at reasonable prices the necessities and even the luxuries of life, for the wages earned by the men who work for the Fairmont Coal Co. enable them to indulge in many of the luxuries. There are churches and schools, halls for the meetings of lodges and amusement places for young and old. While not regarded by the company as its model town—Monongah and perhaps others being of a still higher grade—yet this serves as a type of the whole.

By such treatment as this company has always given its men it has been able to secure and retain their confidence, and to lead them to feel that an identity of interests such as exists between employer and employee calls for mutual confidence and concern in one another's affairs. In this way the men have been kept from feeling the need of an organization to protect them in their rights, and the consequence is the Mine Workers' Union has never secured a foothold in this field. Those who have witnessed the troubles that have so fre-

quently disturbed the relations between operators and miners in other sections of West Virginia and in other coal-producing States will find here the explanation of why this section has not been so disturbed. There is a reciprocal confidence between employers and employees that brings them together upon the broad plane of a common humanity and makes them regard each other as men whose feelings and opinions are entitled to respect.

The coal mined in this region is taken from the Pittsburg seam, which is found here in a high state of perfection. It is of a uniform thickness of eight feet, and bears only the thin lines of slate that serve to define its character, and which are never absent from the true Pittsburg seam. It lies above the water-level throughout almost the entire district, and is worked by the drift process in all the operations in this section except one, which is by a shaft of only 100 feet in depth. It is very uniform, is easily mined, and does not lie high enough to make long tipples necessary.

The Fairmont coal is said to be a pure gas coal, and the claim is made that it is unsurpassed by any gas coal in the world. It contains a high percentage of volatile matter, the extraction of which for gas purposes leaves a valuable coke, owing to the amount of fixed carbon it contains, while the peculiar proportions of the two in its natural state make it a valuable steam producer. On account of its hardness it stands transportation and the hard usage incident to transfer from railroad to shipboard better than any other American bituminous coal, and is therefore particularly valuable for shipping long distances. It is said to bear a closer resemblance to the famous Cardiff coal than any other American coal, and its friends claim it is destined to largely displace the product of the Welsh mines in the markets of Continental Europe.

The Fairmont Coal Co. has at its various operations about 1200 coke ovens, and manufactures a considerable quantity of coke. The coke produced is of a very superior quality. It has a very bright lustre, due to the coating of graphite brought about by the quality of the coal and the high degree of initial heat of the ovens. It is very hard and dense, qualities that render it particularly adaptable for foundry purposes, where it is called upon to withstand heavy burdens in the cupola without crushing. Here also the graphitic coating proves itself of value in protecting the coke from the action of the gases in the upper zone of the blast furnace. For smelters and reduction furnaces Fairmont coke is unexcelled, its hardness protecting it against the rough handling of transportation, from which a softer product suffers greatly. Some years ago this company built up a considerable trade in crushed coke, which replaced the smaller sizes of anthracite coal in many places, proving a clean and economical fuel for domestic purposes, burning without smoke, with a small proportion of ash, and requiring very little attention.

The Fairmont Coal Co. not only stands first in the production of coal in this section, but it is largely interested in many other things hereabout. Chief of these is the Fairmont & Clarksburg Traction Co., with its electric road between the two cities named, a distance of 32 miles. This line furnishes transportation between Fairmont and a majority of the mines operated by the company, and is of the greatest convenience not only to those interested in mining operations, but to the general public as well. Cars run each way every hour, and a tremendous traffic has been built up in the country contiguous to the two cities. In many other ways the controlling spirits of the great coal com-

pany are showing their interest in this city and section, and in the 32,000 people who depend upon the work furnished by their gigantic operations for daily sustenance. The company employs under ground almost 6000 men, and in other capacities at least 2000 more, so that 8000 workmen are thus given employment. Counting four for each workingman, the number of mouths to be fed by this company is swelled to 32,000—a tremendous responsibility, truly.

There are other coal operations in this section besides those belonging to the Fairmont Coal Co.—the Clark interests, the Hutchinson interests and others have half a dozen or so mines working now, and the establishment of others is being prepared for—but the business is so largely dominated by the one concern that the story of its progress is the history of the development of the field.

The general offices of the Consolidation Coal Co., which, as pointed out above, is the controlling power in all these operations, are in the Continental Trust Building at Baltimore. The general officers are C. W. Watson, president, Baltimore; J. H. Wheelwright, vice-president, Baltimore; S. L. Watson, treasurer, Fairmont; Walton Miller, assistant treasurer, Fairmont; T. K. Stuart, secretary, Baltimore; A. S. Dunham, general auditor, Baltimore; L. L. Malone, general manager, Fairmont; F. W. Wilshire, general manager sales, 1 Broadway, New York. These are also the officers of each of the subsidiary companies.

Since writing the above I asked a leading citizen of Fairmont, who is not connected with the Fairmont Coal Co., what he considered the secret of the success of the Watsons. "In the first place, they know more about coal than anybody else in this country," said he, "and in the second place they know more about handling labor." I think that sums up the whole story.

It is a far cry from the operation of one small plant with 14 acres of coal to the control of the immense operations and the 100,000 acres of territory which are now dominated by the Watson influence; it is not nearly so far from their present commanding position to the control of the entire coal business of the State. Suppose they undertake to extend their ideas of combination and economy over the whole West Virginia field, what will stop them?

GEORGE BYRNE.

### TRI-STATE ACTIVITY.

Manifestations in West Virginia, Kentucky and Tennessee.

[Special Cor. Manufacturers' Record.]

Wheeling, W. Va., July 29.

A fortnight's travel or more through out sections of Tennessee, Kentucky and West Virginia shows that the farmer is busy and hopeful, that the merchant is filling big orders for fall trade, and that the manufacturer is running on full time. In this section of the South the wheels of industry are spinning faster than ever. Mills are rushed for orders. Manufacturing plants are pushed by the demand for wares following the assurance of good crops. In manufacturing and mining as well as agriculture immense opportunities present themselves, and ere long the natural increase of its population will be largely added by a better class of emigration that it needs. The great factor, however, in the development of this section in making useful these natural resources has been its railroads.

In Louisville, Frankfort, Lexington, Paris and Winchester, Ky., industrial and mercantile activity knows no abatement. Cities and towns are vying with each other in healthful competition. Trade organizations lend a helping hand, but much of their work might be accel-

ated by persistent publicity. Middlesboro, Ky., is feeling an impetus in all lines of business. Her central position, equaling her coal and timber fields in wonderful abundance, assures this city a bright and prosperous future. Said Mr. John Howard, a leading civil engineer of the city: "Middlesboro has taken on new life and new activity, and our prospects were never brighter. New industries coming in, greater building activity and the opening up of new coal fields assures us double the population in the next five years."

Winchester, Ky., is growing with great strides. Very few cities in the State are developing as fast as Winchester. Remark Mr. Lucien Beckner, one of Winchester's most prominent lawyers, and a man ever to the fore in all new enterprises: "We have here in Winchester all the elements for a growing and prosperous city, and I am glad to say our people are awakening to the fact at last, that as we have, so we must utilize, and in no year in our history are we going ahead with such strenuous activity."

At Johnson City, Tenn., building operations were never greater in the history of the city. Mr. E. E. Ellsworth, secretary and treasurer of the Commercial Clubs, says: "Johnson City is feeling a new life in all business avenues. New railroads reaching out into undeveloped fields, new manufactories coming in and building operations discredit any outlook for business stagnation. We are going ahead slowly but surely." Messrs. C. N. Brown & Co., representative real estate dealers, spoke also in an optimistic vein of the future of Johnson City, and state "that during the past and present year realty values have increased in proportion to our development, and as we have had a long experience in realty matters, we are conservative in our estimates."

Five railways—the Southern, the South & Western, the East Tennessee & Western North Carolina, and the Virginia & Southern and the Johnson City Southern railways—have largely helped Johnson City in its great development. The South & Western Railway is now in process of construction from the matchless coal fields of Southwest Virginia through Johnson City to the Seaboard Air Line Company's lines in the Carolinas, over which lines coal will be carried to South Atlantic ports. Seventy-five miles of this line of the South & Western are now in operation south of Johnson City in North Carolina. The capitalists behind this road are Thos. F. Ryan, Blair Bros. of New York and Geo. L. Carter and their associates. Over 250,000 acres of select cooking, steam and domestic coal lands are in the counties of Wise, Dickinson and Buchanan, Virginia, and Pike county, Kentucky, through which this road traverses. This railroad will be broad enough for double tracks, and when completed it means that Johnson City will have cheap coal of the best qualities and low competitive freight rates to all points East, West and South. This railroad is spending \$40,000,000 in its construction. There are over 10,000 men working on its construction today, and the work is being pushed to rapid completion.

Bristol, Tenn., is no laggard in the race for industrial supremacy. This city has made masterly efforts. It is only another exemplification of what this section of the South is doing. Mr. J. B. Peters, general manager of Bristol's Board of Trade, a man of great push and energy, stated to your correspondent: "Since the organization of the Board of Trade, and mainly through its efforts, 19 industries, some quite large, have been inaugurated with capital aggregating over \$2,000,000. The city has recently authorized a bond issue of \$300,000 to extend



and improve the water-works system. A new plant, capitalized at \$600,000, is just being organized to utilize the water at Holsten river, at Fish dam, 12 miles from the city. The capacity of this plant will be 7000-horse-power, which the company is contracting to furnish to the users of power at the rate of 35 cents per horse-power per year; this is about a little less than 1 cent per kilowatt per year. A local company has also been organized with a capital of \$50,000 to distribute the electric current through the city and vicinity. Joseph D. Mitchell of Mitchell-Powers Hardware Co. is president, and Thos. Swann, secretary and treasurer."

In Huntington, Parkersburg and Wheeling, W. Va., is evidence of just such thrift and enterprise as are to be seen in Tennessee and Kentucky. The vast stores of minerals, oil and gas are forces here which are being more and more utilized. If one would measure the future and grasp what it holds in store for West Virginia, one must study the subject in the light of the material advancement of the whole country. Secretary R. B. Naylor of the Wheeling Board of Trade in a pleasing interview said: "We appreciate the work of the MANUFACTURERS' RECORD in our section, and largely through its efforts have we been enabled to reach the outside world and draw attention to our great possibilities and advantages. Wheeling is forging along masterly in ore development. Our mills are busy, our industries thriving, our merchants doing a better and bigger business than ever, while our manufacturers are keeping pace with orders and booking more. Surely we have no idle moments nor idle people. Everywhere—in forge, market and mart—is heard the hum of industrial activity, and our people are busy in blissful expectations of another prosperous and abundant year."

ALEXANDER HELPER.

### QUIET AT BIRMINGHAM.

All Furnaces Behind in Their Deliveries.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., July 29.

The majority of holders of iron report a very quiet time during the past week, and while one or two firms placed a respectable tonnage, it was a very quiet week with the majority of the iron interests. All along the line there was the same clamor for undelivered iron that has been previously reported. And there has not been much headway made in reducing it. All the furnaces are yet more or less behind in their deliveries, and this is specially the case with the better grades. Not a single furnace has turned out its maximum capacity, and the output of the better grades has been very disappointing and has caused great inconvenience to both the buyer and the seller. Even now the furnaces are doing very little in the way of easing up the situation in this respect. There were some inquiries on the market for the better grades, but they had to be turned down because every ton that the furnaces can control is placed for delivery on matured contracts. It is not an easy matter to say when the situation in this respect will end. But it looks now as if it might last some time longer. As the furnace output has been for some time past only about three-fourths of maximum capacity, one can readily see that Mr. Furnaceman is not enjoying life on a bed of roses. The most probable reason for this condition has been given, and no better one has so far been formulated. Each furnaceman has a little comfort in the thought that he is just as well off as his neighbors, and all admit their mail is yet burdened with appeals for shipment of iron past due. Your correspondent has read letters of this character from New England points and from

both the Middle and Western States. Even nearby points are not exempt from the same inconveniences. The result is that while good foundry iron, if available, would bring top prices, the lower grades have been in poor demand, and to make them go quick some concessions have been made in values, and very little has been said of them. The strike in the Northwest has had some influence in re-establishing confidence in values, and little or no iron has been offering for forward delivery. It is yet a difficult matter with some of the furnaces to obtain in season all the ore they need, and in some cases it has been an uphill business to keep going. Such a condition of affairs necessarily increases the cost of production and makes the increased cost run anywhere from 20 to 30 per cent. That the situation is a serious one is very apparent. It costs just as much to run a furnace turning out but half capacity as it costs when it is turning out maximum capacity. The sales of the past week were generally in small lots, and covered mostly spot and nearby shipments. There were some sales of spot and nearby delivery iron at \$21 and some at \$21.50 covering August and September delivery. But none of the lots were of any magnitude. For the fourth quarter \$19.50 was offered and declined, while in at least one case \$20.50 was accepted for third quarter delivery. There were a few scattering sales for the first quarter of 1908 at \$18.50, but they were insignificant. Some small lots of charcoal iron were placed at 50 cents per ton less than has been reported of late, say, \$26. Toward the close of the week it was reported that a sale of 6000 tons had been made, but the interest credited with making the sale declined to confirm or deny the report. Your correspondent is inclined to believe the report, and can safely guess that the sale was mainly of low grades. There is some accumulation of the low grades of iron, but it is of no significance whatever, and results solely from the bad workings of the furnaces in respect to grade results.

There is nothing to say this week concerning the scrap-iron market. There is no demand of any moment, and prices are reported as without any change. Coke is reported again this week as in good demand and at full prices. The scarcity is considered only temporary, due to local conditions, and in which the weather plays a prominent part. There was one sale at \$3.50 for a lot that had been on hand for some months. There was another sale of 300 cars for delivery during the next 60 days, ranging in price from \$3.75 to \$4.25. There were some sales at figures above these, ranging in some cases around \$4.50, but there were no large orders traded in. The weather has been sweltering, and has greatly hampered the transaction of business of all kinds. The Birmingham Iron Co. and the Birmingham Coal Co. have consolidated under one name and have incorporated for the concentration of their interests and the added convenience to their large interests. It has not changed in any respect the ownership of the respective properties.

There were a few incorporations the past week, but none of them were of importance. At the various industries they are still driving as hard as they can, and are in the same fix as the furnaces in regard to deliveries. They are yet complaining of the scarcity of labor of all kinds and of the inconvenience to which they are subject on this account. Wherever you go you are confronted with the fact that this district is going steadily forward in every line of industry, and improvements are the order of the day. Some of them are slow in reaching conclusion, but this does not make them any the less sure.

J. M. K.

## WHY MORE ENGLISHMEN DO NOT GO SOUTH.

[Special Correspondence Manufacturers' Record.]

Halifax, England, July 23.

Inquiry made on this side gives no cause to suppose that more than the usual proportion of English emigrants this season have headed for the Southern States. In course of time some newcomers hope to go farther afield, but while the venture is experimental there is an inclination to remain within easy touch of the Northern ports. It is still the case that would-be emigrants hear little of the merits of the South. The Emigrants' Information Office—the Government department which is supposed to supply authentic information to all who ask—has little directly to say about the Southern States. The climates of Delaware, Maryland and Virginia are called temperate and healthy, "except near the swamps." The lowlands of North Carolina and all of South Carolina are said to resemble Southern Europe in temperature. The hills of North Carolina are called nearly as cold as New England. Except for some parts of Texas and Arkansas the climate of the South Central States is declared to be very hot and ill-suited to English people.

The circular issued by the office quotes fares from New York to many points in the West, but to none in the South except Galveston, New Orleans and Jacksonville. It cites certain rough rates of wages in Baltimore, New Orleans and Texas, showing payments for mechanics and laborers to compare not unfavorably with rates in Chicago and Oregon. Land laws are noticed briefly, but no prominence is accorded in other matters to the South. Of the States as a whole this authority says that only men who have some small capital should go. Men who have never worked, clerks, salesmen and people without special trades are cautioned against going. Very firmly are English people warned not to buy land from agencies or companies, however respectable, without themselves seeing the property.

This caution against buying land is noteworthy, because to the inquirer the South seems especially anxious to sell real estate. Suppose an emigrant to apply to the London agent of a Southern railroad for information about the South, he immediately receives a full pound's weight of circulars issued by land dealers. He gets something more—to wit, folders advertising Southern cities, facts about farms and climate and encouraging words from settlers on Southern farms. He gets references to numerous Government and other officials, but of the manufacturing industries of the South he gets but a glimpse. Contract labor laws, with their stringent prohibition of advertising, are doubtless responsible for the disproportionate attention paid to real estate. On the evidence of what he sees the applicant may excusably form the impression that the South is indeed for the man with capital; for the man who can buy a home rather than for one who seeks gradually to acquire property in that form.

Formation of their opinion is fastened by a contrast. Suppose the emigrant to write precisely in the same way to the London agent of the Canadian Manufacturers' Association. From him applicants receive quite a different bundle. Money in the emigrant's purse is not pre-supposed, and the Manufacturers' Association has little to say of land or of farming. But if a man thinks of going abroad and will detail his circumstances the association will tell him in about three

weeks what it can offer him in Canada. A blank form is sent for the applicant to fill with particulars as to name, age, condition, children and trade. He is to say the experiences he has had, the firms for whom he has worked, whether he is a member of a trades-union and to enclose testimonials as to his capacity and character. A list is supplied him of situations vacant in Canada for women and for men, and the wages payable are stated in English currency. From this the workman sees that in some trades, at least, he is likely to get 50 per cent. higher wages than at home. He gains the impression that many trades want men, for a miscellaneous lot of vacancies are advertised. These include tinsmiths, moulders, waiters, machinists, gliders, coatmakers, compositors, cigarmakers, shipwrights, quarrymen, harnessmakers, cement laborers, cabinetmakers, chocolatmakers and so forth. Moreover, in certain cases the inducement of an assisted passage is held out.

All this is so much more definite than anything that can be done on behalf of the South, that Canada inevitably asserts a stronger claim over the mind of the undecided. The association does not forget to play on prospects in Canada for the children, on the benefits of protection, on the imperial sentiment and on the truth that one may live better in Canada than in Europe, even if the advantage in wages is not marked. There are no fees for information given or situations found, and the association is somewhat of an official body and is thus to be trusted better than private agents. Then the Emigrants' Information office treats Canada in much fuller detail than the United States. Wages and prices of commodities are named more explicitly, ampler details are given of the trades which are needing men, and the inquirer at once feels to know more of what to expect in Canada than in that United States which is known only by hearsay and by the letters of friends.

In the latter, fault is found with Canada also, but it may be worth while to mention faults which are frequently found by English workmen newly settled in the Northern States. These advise friends to go direct to places where they may find somebody they know. They are warned not to expect friendly advice or direction either from the Americans they meet or from any Englishmen they encounter in the new surroundings. One of the first things he misses is that sense of the mutual interdependence which exists between workmen in England and to a less extent between employer and employed. This is grown out of, as the grumble against immigrant Englishmen shows. And the new arrival accustoms himself to being rapidly discharged from one job and taken on at another. But deep down in the English breast is a fondness for the "steady job" and a distrust of hustle—which is looked on as being as much make-believe as hard work. One of the facts that has certainly not been made widely known amongst classes of people whose presence would be useful to Southern manufacturers is that Southern life is more English and urban than Northern. Like most other characteristics of the South that truth is masked from English people who do not travel or read but little. Impressions are being derived almost wholly from experiences in the North, and it is as well to know quite clearly that from the existing state of the labor laws the South is the chief sufferer so far as English emigration is concerned. J. A. HUNTER.

## TO ENRICH FIVE STATES.

### Plans for Extensive Reclamation of Wet Lands.

[Special Cor. Manufacturers' Record.]  
Little Rock, Ark., July 29.

Perhaps the most important industrial and economic proposition before the people of Eastern Arkansas, and, for that matter, the people of Southeast Missouri, Western Tennessee, Western Mississippi and Eastern Louisiana, is the materialization of the plans so thoroughly discussed at the drainage convention just closed in this city. Representatives from these five States met here as the Mississippi Valley Drainage and Highways Association, an association called into being at Memphis less than three months ago, but which promises to be more than a passing fancy. The representatives come from all quarters of a section embracing 40,000 square miles of "wet lands," and among the delegates are many who have already become pioneers in the art of land drainage, and who are carrying into these conventions the value and enthusiasm of their practical experience. Certainly never in the Mississippi Valley has there been a convention of this nature in which there was more concerted action, more unanimity of opinion, less oratory and more facts at hand.

Hon. Ollie N. Killough, president of the association, is a citizen of Eastern Arkansas, and already sits as a member of the Saint Francis Levee District Board in charge of the largest levee district in the State. Every officer of the association and practically every member is a man of wide experience in the work of land reclamation, and there has already crystallized into being a very definite purpose; to secure from Congress an appropriation of \$50,000 to defray the expenses incident to a careful survey of the lowlands of the five States mentioned, definitely outlining the various "basins" and suggesting a practical plan for co-operative drainage, in order that the whole enterprise may be accomplished upon the most economical basis.

There were present at the convention a number of Congressmen, good roads experts, experts from the Government's bureau of drainage and from other departments of the General Government, showing a most gratifying tendency on the part of the Federal Government to co-operate. In fact, as was admitted by Congressman Robinson and others and emphasized by an outright declaration from Mr. Elliott of the drainage bureau, the Government stands ready to enter heartily into any plan that is based on logical lines of reclamation.

While there have been drainage conventions before, and while much has been said in a general way about the almost startling possibilities of reclaimed territory in the Mississippi Valley, it remained for the Saint Louis, Iron Mountain & Southern Railway, through its industrial commissioner, the indefatigable D. E. King, to initiate the present action in the territory included in the five States above mentioned. Last January a tour of the entire eastern part of Arkansas and a large portion of Northern Louisiana was made by Colonel King, in company with experts from the agricultural and engineering departments of the Government. The survey was general, of course, but nearly two months' time was occupied in going over the ground. Stops were made at the various county-seats in the areas affected by overflows, and careful data was gathered regarding the surface and rainfall conditions, as well as regarding the temper of the people of these sections toward the reclamation project. As a result of this tour and survey the engineers prepared a map of the country of Eastern

Arkansas and Northern and Eastern Louisiana, showing the 10 natural basins into which the surface was divided, and also indicating a general plan for draining the entire section. This, of course, was an enterprise on the part of the railway company, every particle of expense of which was met by the Missouri Pacific. But it had its lesson, and when a call was made for a meeting of interested parties, Congressmen and large planters, etc., soon after the inspection trip, an informal meeting was held at Washington, the meeting at Memphis planned, and soon the entire section was interested. Thus, instead of the 20,000 square miles traversed by the Missouri Pacific, the proposition now includes twice that and affects five States instead of three.

Some figures on the various wet land areas are interesting. Missouri has (approximately) 3800 square miles; Tennessee 1000; Arkansas 9200; Mississippi 9000 and Louisiana 16,000. The total valuation, reclaimed, would run to from \$2,000,000,000 to \$3,000,000,000, with an annual income estimated at hundreds of millions. As Congressman Floyd of Arkansas well said, it means the addition of an empire of wealth; an alluvial expanse almost as large as the whole State of Arkansas or Tennessee and as fertile as the Nile.

President Killough, in his address to the association, emphasized the analogy between the present fight for drainage and that made a few years since, in practically the same section, for levee districts, declaring that the necessity for drainage now was far greater than was the need of levees at that time. Yet the Government came to the help of the planters and valley citizens. So pronounced has this assistance become that in one instance, where the original appropriation was for \$40,000 to aid in the levee work, the last appropriation for the same territory was \$400,000—just ten times as much; and all this has come within a decade. This was urged as proof positive that the General Government would co-operate to the fullest possible extent.

The most telling facts adduced, however, came from pioneers in the work of drainage, such, for instance, as Otto Kochtitzky of Cape Girardeau, Mo., a section where much has been done in a reclamatory way. Mr. Kochtitzky showed that lands originally worth from \$10 to \$20 per acre, were, after being reclaimed, worth from \$75 to \$100 per acre, and that the cost of reclaiming was comparatively small, when reckoned on the present market value as a basis. More than 600 miles of channel have been laid in this section according to Mr. Kochtitzky, each mile draining a section of land.

Harry E. Kelly of Fort Smith, who is a member of a drainage board in the eastern part of this State, and who has made a wide study of conditions both in Missouri and Eastern Arkansas, is certain that reclamation will cost only a few dollars, perhaps not over \$5, per acre, in many sections. He cited instances in the timbered belt (and that includes a large portion of the whole "wet" section) where "logging" costs \$8 per 1000 feet of stock, and from figures obtained from river-men found that the same timber, if on dry ground, could be got out for \$3 per 1000 feet. As much of the land will cut from 5000 to 10,000 feet per acre, the saving here, which could be considered in the sense of a drainage fund, is quite apparent.

But, as was well said by Congressman Robinson, there is no longer any question as to the value of the reclaimed land or the logic of the reclamation project; the question now is, Can Congress be made to see the merits of the enterprise to such an

extent that an appropriation for a general survey will be forthcoming? One thing is certain; every Congressman in this State is pledged to the successful issue of the matter in Congress, and the same might be said of the Congressmen from the other States. The agitation has gone even beyond the bounds of the particular territory affected, for the South and West realize that the success of this gigantic enterprise means the addition of untold wealth and power to the whole South and West. The people generally are alive to the situation, and if given an opportunity will not shirk their portion of the individual expense incident to carrying out the project after it has been once logically planned and given the sanction of experienced engineers. In this section the work is to be kept in motion by the Missouri Pacific Industrial department, and in October a second tour of the territory will be made, even more careful than that of last winter, and a regular "school" of instruction in drainage facts will be given at every point of consequence in those sections of Missouri, Arkansas and Louisiana affected by the valley overflows.

"In so far as the work of the Mississippi Valley Drainage and Highways Association is concerned," said Colonel King, after the close of the recent convention, "that might well be considered done. The association was for the purpose of agitation; the dissemination of drainage data. That has largely been accomplished, and the association has fulfilled its mission. The continued work must be in and among the people themselves." He is thoroughly optimistic and believes the amount asked for will be forthcoming at the next meeting of Congress.

The following is the section of the resolutions committee report which contains the gist of the request of Congress:

"Resolved, That it is the sense of this association that the representatives in Congress from the territory here represented be requested to secure, if possible, an appropriation from the Federal Government in such sum as may be adequate to make complete investigations and surveys, blueprints and plans of drainage of the lands within the lower Mississippi Valley as may be deemed susceptible of drainage and reclamation, and estimates of cost of properly draining and reclaiming the same."

This was unanimously adopted, as was likewise a resolution commending the scheme for a deep waterway from the lakes to the gulf; also commending the appointment of the Inland Waterways Commission.

FORREST A. GARRETT.

## HUB OF OPPORTUNITIES.

### Alexandria's Advantageous Position in Louisiana.

[Special Cor. Manufacturers' Record.]  
Alexandria, La., July 27.

Alexandria is situated in the center of Louisiana, on the Red river, navigable every day in the year, 194 miles northwest of New Orleans and 303 miles southeast of Dallas, Texas. It is recognized as the "Hub City of Opportunities" for men with large or small capital. It has a population of 17,000, which has had a growth of 300 per cent. in six years and is growing far beyond the expectations of many of the "old-timers."

This city has splendid transportation facilities, and is reaching out for more lines of rail. Here is the junction of the Southern Pacific, the St. Louis, Iron Mountain & Southern, the Louisiana Railway & Navigation Co., the Texas & Pacific, the Louisiana & Arkansas, the St. Louis, Watkins & Gulf and the Rock Island Railroad. Several other lines are being projected and will be built during the year. Twenty-six passenger trains

arrive and depart daily. Alexandria may very truthfully be said to be situated in the center of a spider web of railroads.

There are in Alexandria 28 wholesale and jobbing houses, pine, cypress and hardwood lumber mills, sugar and syrup factories, cottonseed-oil mills and compresses handling 60,000 bales annually. One of the great elements of strength in the building up of this city has been its banks. There are four banks here, with deposits of over \$3,500,000. Electric lights and water-works owned and operated by the municipality are on a paying basis. The city has 14 miles of asphalt and other street paving. The sanitary condition of the city is as near about perfect as human agency can make it. A well-equipped and modern electric street railway has just been completed and has been the means of developing handsome residence sites near the city, circling the city in all of its six miles of ramifications.

In public buildings Alexandria has cause to be proud. There is the State Insane Asylum, a \$75,000 college, a \$50,000 theater, a well-equipped and ably-managed sanitarium, churches of all denominations, State encampment grounds and other buildings a credit to any city twice the population of this city. One of the finest hotels, which will cost \$500,000, will be ready for occupancy this fall.

There are 75 sawmills within a radius of 50 miles of the city manufacturing pine, cypress and the hardwoods, and they run full time winter and summer. Factories are exempt from taxation until 1910, which is a great inducement for manufacturers to look this way for the establishment of plants.

Mr. M. L. Alexander, secretary of the Progressive League, in speaking of Alexandria said: "Do you know it is a fact that roses bloom here every day in the year? Could I say more in a volume than announcing this fact as regards our climate? The alluvial soil of our farm lands raises abundant crops of cotton, corn, sugar-cane, potatoes and garden truck, vegetables being raised continuously throughout the year. We are, therefore, the garden-truck paradise of the entire United States. Not a single day out of the 365 but what vegetables grow and produce an abundant yield. No finer opportunities are offered the truck grower than right here in this section. We offer exceptional inducements for the location of factories, particularly woodworkers, situated, as we are, in the center of the State, in the heart of a magnificent timber section. Box, handle or furniture factories would pay handsomely here; in fact, all the conditions are favorable in Alexandria for the judicious investment of capital. Excellent schools, fine climate and a prosperous and homogeneous population make this place one of ideal location. Our fine artesian water, even temperature, perfect sewerage and adjacent pine forests give this city a death ratio which will compare with the best in the country. The Progressive League will be glad to give all information concerning this section of the State upon application."

ALEXANDER HELPER.

Consul-General Bray reports from Melbourne May 24 that there is every evidence of very prosperous conditions prevailing in Australia at the present time. The deposits in the banks of the Commonwealth increased last year from \$508,983,599 to \$541,289,076, or by nearly \$32,500,000. This increase is exclusive of the savings bank of the State of Victoria, the depositors in which number 486,018, with over \$58,000,000 to their credit, showing an increase of over \$5,000,000.

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# CURRENT EVENTS AS VIEWED BY OTHERS

## FIRE-RESISTING BUILDING.

[F. W. Fitzpatrick in *Moody's Magazine*.]

Fire constitutes the greatest single tax levied upon us. Even in a normal year fire costs us \$200,000,000. No country on earth, not even Japan or China, has such a fire record as ours, and yet we pretend to be the most civilized! This year promises to be a phenomenal one in the building world. We hope to complete \$750,000,000 worth of buildings. What think you of a people that destroys—wantonly, negligently, carelessly, criminally—five-sevenths of what it produces and then cackles over being a great producer? An absolutely fireproof building means one whose exterior cannot be damaged by external fire and will not permit fire to gain access to the interior. The frame must be of steel, completely and perfectly protected with brick or tile or other non-damageable fireproofing material, or the construction may be of reinforced concrete. The interior fittings and furnishings should be of incombustible material. The windows should be of wired glass and metallic sash, the stairs and elevators should be closed in absolutely fireproof partitions and self-closing doors, so that every story constitutes a unit by itself, and further, the units of space in those stories should be as small as possible, so that any fire originating in the contents of a room would be confined to a limited area in which it would be easy to combat it.

## COAL FOR MASSACHUSETTS.

[*Boston Evening Transcript*.]

President Richards of the New England Gas & Coke Co., in his address at the launching of the great steam collier *Everett* at Fore River, showed that the advent of this ship and her sisters, the *Malden* and *Melrose*, of the same tonnage, means not only an important contribution to Boston's mercantile marine, but a cheapening of the cost of the fuel from the South. This is a vital factor in the continued prosperity of Massachusetts manufacturing.

Bostonians who see occasionally on a harbor trip the grimy barges and tall schooners, loaded until their upper decks are almost awash, lying in the stream, do not often realize the magnitude of the coal trade in Boston. New England is not only barren of raw material, it is equally barren of fuel. All the anthracite coal for domestic uses and all the greater quantity of bituminous coal which feeds Massachusetts furnaces and drives the machinery in Massachusetts mills has to be brought from the Middle State and Southern coal fields to our State. Only an insignificant quantity of either hard or soft coal reaches Eastern Massachusetts by rail. Rail receipts at Boston of both hard and soft coal in 1906 were only 116,000 tons. But in that year there came to this port by sea mountains of anthracite—1,630,000 tons in all—and 2,772,000 tons of bituminous coal from domestic ports, besides 658,000 tons from Nova Scotia.

Boston's anthracite coal comes almost altogether from the railroad terminals at Philadelphia and New York harbor, nearly equally divided in quantity between the two great ports. Our bituminous coal comes chiefly from Baltimore, Newport News and Norfolk, Philadelphia sending us only 589,000 tons of the 2,772,000 tons of soft coal received in 1906.

The three large new colliers of which President Richards speaks, that will serve the New England Gas & Coke Co., are built for the trade from the coal ports of Hampton Roads. This immense traffic is now

handled by a few steamers, chiefly of an old type and inferior tonnage, by sailing schooners and by barges drawn by ocean tugs. This is a heterogeneous fleet of varying efficiency. Taken altogether, it does not constitute the most economical kind of transportation. In the winter storms the barge tows are delayed and imperiled, and the mortality among these craft is appalling. The large schooners are fairly regular in their passages except in the light winds of the summer season.

These great new colliers will have the advantage that they can defy the elements and make regular passages all the year round. But an economic fact even more important than this is President Richards' promise that these ships shall have quick dispatch through improved processes of discharging their cargoes. They will each bring 7200 tons of coal on a single trip, and he states that this can be unloaded in 10 hours. The rapid discharging and great power of the new colliers will enable these three ships, he estimates, to bring into Boston every year about 1,500,000 tons of coal, or more than one-half of the total amount of the bituminous coal received here last year from all the coal ports to the southward.

Here is a vivid presentation of the economic efficiency of the new steamships and of the progressive methods of this New England company. The ships will bring coal not only for the company, but for other consumers. That is, the new colliers will go definitely into the general coal-carrying business. They will have a marked effect upon coal freights, which are just now running rather high. A schooner of 1400 tons was chartered yesterday at \$1.20 a ton to bring coal from Baltimore to Boston. Undoubtedly the new steam colliers can bring coal at a profit for much less than this.

Cheaper coal—and it should be remembered that our American Southern coal is far better steam coal than the Nova Scotia variety, freer from sulphur and more valuable in almost every way—will be a direct boon to Massachusetts manufacturing. Nearly one-half of the enormous quantity of 2,772,000 tons of bituminous coal received at Boston last year was forwarded to Lowell, Lawrence and other manufacturing towns. Thus the *Everett*, the *Malden* and the *Melrose*, when they go into commission, will be potent factors in strengthening the power of Massachusetts to meet the formidable competition of other manufacturing States. Here is the right kind of pluck and enterprise, which does not waste itself in talk, but acts in a decisive way to keep Massachusetts prosperous.

## CHEERFULNESS AN ASSET.

[*Wall Street Daily News*.]

Perhaps there are few of the busy men of affairs who realize that smiles, good nature and a sense of humor are actual business as well as moral and mental assets. Laughter is like sunshine, and drives away clouds and mists of doubt quite as surely. It not only helps to make the days more cheerful, but it makes success more possible. If the man who has many and serious cares upon him, coupled with responsibilities, would get up in the morning determined to look for some gleam of happiness during the day, he would be amazed to find how much more easily the appointments and interviews, which had seemed so difficult, passed off. Go down to the office with the determination to make the best of every moment. If there is a tangle to be straightened out,

go at it with an unruffled brow and a belief that it is coming your way. Pass through the employees' department with a smile and a nod. It is strange to observe how the faces brighten and the work goes forward with a new zest when it is known that "the old man is in a good humor this morning." More than that, the people who are in care of the affairs as underlings are quick to note the sleepless eye, the pallid cheek and the careworn face. It creates an element of unrest among them. Their work lags, their courage decreases and they feel that something is wrong. This means to them that their daily bread is menaced. They will not work as well. They will not work as keenly for the interests of the man who forgets that they are as keenly sensitive to hope as the flowers are to sunlight. Keep the atmosphere of good cheer and hopefulness throughout your office, and then watch with what regularity your bookkeeper gets out the accounts and how swiftly and correctly the day's allotment of work is done.

## JERSEY'S SHIP CANAL.

[*Newark Evening News*.]

The recent visit to this city of Dr. Elwood Mead, chief of the irrigation and drainage bureau of the Department of Agriculture, very naturally brings anew to public notice the projected ship canal between the head of Newark bay and the Hudson river. Dr. Mead and a Government engineer were here in the interests of agriculture and not of navigation. They came to look over the Newark and Hackensack meadows with a view to recommending Government assistance in their reclamation and improvement as soon as a similar work now in progress in the Florida Everglades is completed.

But no plan for utilizing the waste acres of salt meadow land between this city and the Hudson river can be considered as complete if it does not take into careful consideration the proposed ship canal. By no plan that does not include this canal will the meadows ever be brought to their highest utility and value. Under no other plan will they contribute their full quota of commercial and industrial advantage to this the greatest metropolitan district of the Western Hemisphere. The potentiality of these meadows will be incalculably enhanced by a ship canal. Without it they can never fulfil the demands that future years will make upon them.

Commissioner Bock of the Board of Works had but to suggest to the Government's engineer and representative the plan that has been advocated here for many years to at once awaken their interest in it. It is to be included in Dr. Mead's report to the Secretary of Agriculture, and the Government may finance or assist in financing the whole canal scheme. Reclaiming the meadow lands for purposes of agriculture is an admirable use to make of them, but the ship canal, once opened, would cover the tillable acres with factories and shops and warehouses and terminal railroad lines worth a thousand times as much as the farm values of the reclaimed property.

A canal 1000 feet wide and deep enough to float the heaviest ocean steamers would convert the Newark and Hackensack meadows into the greatest railroad terminal and shipping port in America, if not in the world. It would afford such facilities for loading and unloading cars and steamships as are found nowhere else.

It would relieve the congestion on the shores of New York bay and the Hudson river and would bring into active use and great value every foot of the canal and adjacent property between this city and New York. It is practically impossible to overestimate the value of such a canal.

It may be some time before the Government will take hold of this matter, even after the formal report of Dr. Mead and Engineer Wright has been handed in; but the fact that its influential officials take an interest in the proposed ship canal and appreciate the commercial and industrial advantages such a waterway opens up in a place where it is already greatly needed, goes to show that the scheme is not at all visionary or impracticable. Miles of dockage would thus be added to that now congested on both sides of the Hudson river, and the question of lighterage and of handling of goods would be greatly simplified. The Government generally moves slowly, but Newark can assist in speeding the time when the ship canal will be an accomplished fact.

## NEEDS 20,000 MINERS.

[*Bluefield (W. Va.) Telegraph*.]

West Virginia needs 20,000 additional men in her coal mines before a standard of production equal to her resources can be attained.

This is the conclusion of the State Mine Inspector, J. W. Paul, after a thorough survey of the West Virginia mining field.

One of the first things that must be done before West Virginia can assume a permanent place among the mining States of the Union, thinks Mr. Paul, is the organization of a system that will maintain a constant supply of experienced miners; this supply to grow with the demand for the work. Mine owners now offer special inducements to the Italian and Hungarian laborers, at the same time realizing that Hungarians and Italians are not the most desirable workmen, through the fact that they spend none of the money they earn in the State, and further because they plan to go back to the home country as soon as they earn enough in the land of the free to provide for their families on into old age.

It is to solve this problem of coal-producing workmen that the State Commissioner of Immigration is in Europe at the present time traveling and offering the people of those countries very attractive inducements to cause them to come to the mines of West Virginia, among other places, where men are badly needed. The chief mine inspector thinks that this effort will result in bringing many men with their families to the United States. The class sought will make not only good workmen, but good citizens, as they come to the new land to make homes, not to lay by for homes in the overcrowded home country, which is not able to support all its population.

## PAINTING THE TOWN.

[*Sacramento (Cal.) Press*.]

For six weeks 50 painters have been burnishing up the exterior of every house in McCloud, the big lumber camp in Siskiyou county, including office buildings, sawmills, factories, hospital, schoolhouse, churches, depot, stores and boarding-houses. Not a building is to escape, and there are 250 of them. Every last one of them is the property of the McCloud River Lumber Co., and some of the dwellings are pretentious two-story structures. All of the cottages are of at least five rooms, and half of them are much larger. The town

looks spick and span, barring the part that has not yet been assailed by the painters, whose task is over half done. To start in with the 50 painters had a carload of paint, and since commencing 4500 gallons more have been received.

#### SHORTAGE IN LABOR.

[Wall Street Summary.]

So general is prosperity everywhere, a scarcity in labor is experienced universally. This is undoubtedly an age of great enterprises and unparalleled undertakings, and the labor market of the world is unable to supply the demand. First among the great projects dependent upon physical labor comes the Panama Canal. Forty thousand men find steady employment in its construction, but this number is rarely maintained, for the defections are so numerous that upward of 1000 new men can find work at Panama weekly. It takes a good supply of available labor to keep pace with this requirement. In Canada railroad construction to the extent of 6000 miles is under way. Not less than 60,000 laborers are needed for this undertaking immediately, and doubtless more as the work progresses. The great African projection, the Cape to Cairo railroad, calls for several thousand men, and in this connection the intended double-tracking of the Trans-Siberian Railroad must not be overlooked in considering activities that promise a steady drain of the world's labor market. New York's Adirondacks water supply system will claim a respectable moiety of able-bodied men, and where they are coming from is now a problem for experts. With thousands of miles of railroad contemplated construction in the next year or two in this country, and industrial activity and agricultural development at all maintaining their present level, we are likely to have our hands full in finding the requisite help. The depressing feature of this world problem is the decline in industrial efficiency. Men in close touch with the country's industrial forces claim that in two years the average laborer has shown a diminution of 25 per cent. in physical effectiveness. This, it is said, is due to the fact that opportunities for employment are far in excess of the number of unemployed; hence the sons of toil are not endeavoring to make new records for individual industry.

#### GOLD SUPPLY AND STOCKS.

[Carl Snyder in *Moody's Magazine*.]

There is at the present time but one powerful factor working seriously to change the prospect—that is, the possible depreciation of the currency through the increase in the gold stock.

Within the 10 years, from 1896 to 1906, the annual production of gold has more than doubled. It is estimated that within this period the world's money stock of gold has increased nearly 50 per cent. To many this fact is of profound significance, and to this they ascribe the quite extraordinary rise in prices of commodities and the like which has come within the same period. So there are not wanting serious and sane-minded prophets who look forward to 20-cent cotton, to still higher general rates of interest—10 per cent. even.

Among this same class there is general expectation of a still further rise in the annual gold production from \$400,000,000 to perhaps \$600,000,000. Even the most careful statistician of the subject, Hon. Geo. E. Roberts, director of the United States Mint, looks forward to an average production of \$400,000,000 per year through the next 10 years. That this enormous production, if continued, would mean a serious depreciation of the money standard and a consequent rise in prices is without question.

In the mind of the writer, however, these

prospects seem doubtful. The Germans have a sententious phrase that "No tree ever grows quite to heaven."

That gold mining should share in the world-wide expansion of business seems elementary. There are few industries on a more speculative foundation. It would be extraordinary if, with the general outbreak of speculation all over the earth, gold mining had not taken on an equal activity. When this world-wide "boom" has run its course, when the speculative fever has met with a sharp and perhaps serious check, it seems inevitable that the gold industry should show a similar reversal.

If it does not, it is fairly certain that, with perhaps a temporary reversal of form, prices will rise still further, stock values will be enhanced, while bonds will fall still more, and the prevalent high rates of money of 1906-1907 will look low in comparison. There is no more interesting question now engaging the attention of investigators, and the point is one which every intelligent investor will consider with care.

#### BEWARE OF SOCIOLOGIZERS.

[New York Journal of Commerce.]

Even with the inquiry thus limited as an investigation undertaken solely for the purposes of further knowledge, its character still remains uncertain. The work was not given to the Census Bureau because it was not intended to be statistical in nature, but was to be largely "sociological." That is a term that may include almost anything, and in this case it is highly desirable that it should not be given too loose an application. There has been within the past year or two an immense amount of overwrought discussion on the subject of child labor, especially as employed in the Southern mills. Much of what has been said has been untrue or exaggerated, and much more, while directed against genuine abuses, has been vitiated by false sentimentalism. The apparent aim in many cases has been to stir up feeling against millowners who were not solely responsible for the conditions complained of, and to furnish a foundation for drastic legislation, either State or Federal. The investigation now beginning should be conducted with a view to ascertaining the exact facts on all phases of the question, and its managers should be especially careful to avoid being drawn into the service of any biased group. Particular care should be taken to discriminate between those conditions that can be properly corrected by legislation and those that are the outgrowth of broad industrial influences which will alter only as economic relationships change.

The child-labor question, particularly in the cotton States, is very complex. Children are not employed simply because of the supposed cheapness of their services. They frequently enter the mills because of the desire of their parents or the lack of schools, or for some other equally effective reason. These factors have exceptional influence, because of the extreme scarcity of mill labor, which enables parents to insist on the employment of children whose wages they need, while it makes the employers ready to take almost any assistance that is available. The results of the immigration inquiry now in progress will undoubtedly suggest the introduction of foreign skilled laborers as one of the remedies for existing conditions. Education and better appreciation of the shortsightedness of too early employment for children will result in a different point of view on the part of factory hands themselves. All these features of the situation must be taken into account in this inquiry. Least of all should there be any tendency to urge legislation upon the State governments.

#### Compress Plant For Memphis.

Building permit was issued at Memphis, Tenn., last week for the \$300,000 compress plant and sheds recently announced as to be erected in that city by the Merchants' Cotton Press & Storage Co., and leased for operation to the Gulf Compress Co. This plant will comprise the following: Two high-density compress machines; plant is 300 feet wide and 1280 feet long, divided into four compartments by 18-inch walls, with parapets extending five feet above the roof, the boiler-house and coal bins are depressed below the level of the floor so that coal can be unloaded from bottom dump carts directly in front of fire doors. The roof is to be of the saw tooth type, the distance from peak to peak of the roof being 32 feet. Sheds are to be 24 feet high in the center and 16 feet at the eaves. Plant is to be equipped throughout with automatic dry pipe sprinklers, the water being supplied from the city mains and from a 100,000-gallon tank on tower 100 feet high. The plans are furnished by the engineering department of the Gulf Compress Co., and the building is being constructed by the constructing department of that company. Capacity for uncompressed cotton standing on end is to be 30,000 bales, and the two machines will be able to compress 4000 bales in 24 hours. The building will be equipped with electric-light plant, telephones and storage battery trucks. The engineer in charge is J. R. Fordyce.

The steamer West River, built by the Vineyard Shipbuilding Co., Milford, Del., for the Annapolis & West River Steamboat Co. of Baltimore, has been launched. She is 112 feet long, and is to have an engine of 300 horse-power. The company is a new organization lately incorporated by George T. Melvin of Annapolis and others.

The Baltimore & Ohio Railroad reports for the fiscal year ended June 30 gross earnings of \$82,243,922, an increase of nearly \$5,000,000 (the exact figures being \$4,851,866) as compared with the next preceding year. The net earnings were \$27,263,831, a decrease of \$513,000, this being due to increase in expenses.

Thornwell Fay, vice-president and general manager for the Southern Pacific lines in Texas and Louisiana, is reported as saying that the block signal work on all the main-line track in Louisiana is finished. Block signals are also being installed in Texas, and 44 miles are completed east from Houston.

"We are not contemplating any extension into New Orleans." The foregoing from an officer of the Gulf, Colorado & Santa Fe Railway, Santa Fe system, to the MANUFACTURERS' RECORD denies a recent press report that the company would build from Oakdale, La., to New Orleans.

The action of a West Virginia county court in refusing a natural-gas company's application for the right to lay mains along the public highways is regarded as an obstacle in the way of piping the gas from West Virginia into Ohio.

At a meeting of members of the North Carolina Pine Association at Sumter, S. C., last week a resolution was adopted favoring a suspension of work at the mills during the month of August.

A dispatch from El Paso, Texas, says that John Smith, foreman in the El Paso & Southwestern Railway yards, has patented a railroad tie made of reinforced concrete.

The Cuba sugar crop for 1906-1907 is about completed, and it is estimated that it will reach 1,425,000 long tons, against 1,179,000 long tons the preceding year.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

#### Building Sawmills and Town.

Preparations for the development of timber lands in Shannon, Dent and Reynolds counties, Missouri, are being made by the Bunker-Culler Lumber Co. of Bunker, Mo. (not a postoffice), near Springfield. This company is reported to have purchased about 40,000 acres of yellow pine lands in the counties referred to, and is erecting sawmills to have a capacity of 100,000 feet of lumber per day. Its officers include S. J. Bunker, president and general manager, who is in charge of the erection of the plant and town of Bunker, and S. L. Culler, secretary.

#### New Selling Company.

A new selling company whose purpose it is to handle the lumber production of various mills has been organized at Beaumont, Texas, with a capital stock of \$60,000. The company will be known as that of the Empire Timber & Lumber Co., with offices at 217 Keith Building, Beaumont. Its officers include Messrs. W. C. Gray, president; B. R. Moses, vice-president and general manager; Osa Anderson, secretary, and J. L. Cunningham, treasurer.

#### For Turpentine.

The Gillican-Vizzard Company of New Orleans, La., is reported to have closed negotiations for turpentine the timber holdings of several large lumber companies of Southwest Louisiana and Southeast Texas. Definite plans of operation have not been announced, but it is said to be the intention of the company to install seven or eight turpentine stills during the fall. General offices will probably be maintained at Beaumont, Texas.

#### Lumber Notes.

The Iatt Lumber Co., Ltd., of Colfax, La., has secured a contract to furnish 1,000,000 feet of two-inch board stock to the American Car & Foundry Co. of St. Louis, Mo.

The steamers Taptan and Headlands are loading cargoes of lumber and timber at Pensacola, Fla., the former for Leith and Holland and the latter for Mediterranean ports.

Work is reported in progress on the lumber flume which the Giant Lumber Co. is constructing from North Wilkesboro, N. C., to J. L. Whittington's plant, about 12 miles distant.

The Southland Turpentine Co. of New Orleans, La., which is erecting a turpentine plant at Lake Charles, La., is reported to have completed the necessary buildings and will install the machinery at an early date.

The steamer Dora is loading a cargo of lumber at Port Arthur, Texas, for the Keyser-Muldoon Company of Pensacola, Fla., and the steamer Earlswood for the Standard Export Co. Both cargoes are for export to Europe.

Messrs. E. V. Remington and J. H. Patterson of Oklahoma City, O. T., and William K. McGillivray, John Davis of Spokane, Wash., have incorporated the William K. McGillivray Land & Timber Co. of Guthrie, O. T., with a capital stock of \$500,000.

Secretary Benjamin J. Thurley of the Chamber of Commerce, Mobile, Ala., is sending a letter to lumber manufacturers outlining the purposes of the Gulf Coast Lumber Exporters' Association, which was recently organized at Mobile, and requesting them to become members of the association.



## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### MAY GET BRINSON LINE.

**How the New Chattanooga Road Could Secure Entrance to Savannah.**

It is reported from Savannah that Edward M. Rice, chief engineer of the Savannah, Augusta & Northern Railway, has made an inspection of the Brinson Railway with a view to its purchase by his company. The Savannah, Augusta & Northern is the line for which a contract was lately awarded to William J. Oliver & Co. of Knoxville, Tenn., who are now at work on its construction from Statesboro, Ga., northwest, it being the purpose to build a through line from Savannah, Ga., to Chattanooga, Tenn. The fact that the work under way is from Statesboro in an opposite direction from Savannah appears to strengthen expectations that the company looks to the possible acquirement of a line covering at least part of the distance between Savannah and Statesboro. The Brinson Railway is 25 miles long from Savannah to Springfield, Ga., the latter being the county-seat of Effingham county, and is not far from being an air line in the direction of Statesboro. Its use for part of the route will leave only about 25 or 30 miles to be built between Springfield and Statesboro.

President George M. Brinson of the Brinson Railway is reported as denying the rumor that his road had been sold to the Savannah, Augusta & Northern, and he is further quoted as saying that the report that the new company was after his line was news to him. The Brinson road is also said to be continuing construction beyond Springfield, to which point it has been operating passenger trains for about two months, although it is not yet handling freight. Mr. Brinson's plans, as announced when the line was incorporated, were to build a road from Savannah to Athens, Ga., the latter being one of the points on the proposed route of the Savannah, Augusta & Northern. The Brinson line has a terminal site of over 100 acres at Savannah, and is said to be well situated.

Notwithstanding President Brinson's denial that a sale has been concluded, it nevertheless seems to be expected that a deal will sooner or later—and perhaps at an early date—take place. He formerly had the Stillmore Air Line, which he sold, and which is now part of the Wadley Southern. That deal was rumored for some time, although it was officially denied until the sale was actually completed.

There have also been rumors that the Seaboard Air Line was after the Brinson road, although the preponderance of opinion favors the view that the Savannah, Augusta & Northern will acquire it. It is also said that the new road may purchase the Savannah & Statesboro Railroad, running from Statesboro to Cuyler, Ga., about 33 miles, and part of this line could be made available by building a connection with the Brinson road. As yet, however, nothing official has developed to confirm either of these reports.

### SEABOARD'S NEW SHOPS.

**Work at Jacksonville Progressing—Ten Large Buildings.**

The Seaboard Air Line, according to a report from Jacksonville, Fla., is making good progress with the construction of its shops at Highway, a suburb of that city, and within the next half-year will have spent there about \$1,200,000. The transfer shed and offices, constituting one building 1000 feet long, but narrow as compared with its length, has been completed,

with the result that the dispatching of out-bound freight trains is now conducted there. This new yard is three and one-half miles from the city terminal, and the tract of land that is being improved consists of 95 acres. The foundations and basements for the main structures have all been prepared of concrete. There will be nine buildings beside a roundhouse. Some of them will be of brick and others of concrete, but all with gravel roofs. The cost of these buildings alone will be \$500,000, and their equipment will cost at least as much more. The machinery will be driven by electricity, and electric lights will illuminate both buildings and yards.

The machine and erecting shop is 380 feet long and 117 feet wide; the tinsmith and brass foundry, 181x61 feet; the crane runway, 515x80 feet; the wheel, rod and tender shop, 260x66 feet; the passenger and car shops, 300x90 feet; the storehouse, 280x70 feet; the boiler and engine room, 100x75 feet; the car-wheel and axle shop, 150x30 feet, and the planing mill, 150x45 feet.

There will also be a coaling chute of 3000 tons capacity, a cold-storage house of 10,000 tons capacity, a roundhouse of 10 stalls, besides several smaller buildings, including a hospital and the yardmaster's offices. The turntable has been completed. Between several of the main buildings there are transfer pits and cinder pits, and engine drop pits are also being built. There is an artesian well which is expected to flow 10,000 gallons of water per hour. The yard extends from east to west. Its location is said to be high and well drained. The shops are expected to employ from 1000 to 2000 men.

G. D. Elliott of Hickory, N. C., and W. J. Hadlow of Jacksonville are named as the principal contractors, while H. N. McCrary is resident engineer and W. C. Bagwell is assistant engineer.

### TWO NEW COAL ROADS.

**South & Western and Seaboard Interests Reported to Have Further Plans.**

According to a press report from Knoxville, Tenn., a survey is being made under auspices which suggest that the interests back of the Seaboard Air Line and the South & Western Railway contemplate building a railroad from Moccasin Gap, Va., to a point at or near Knoxville, thus practically paralleling the Holston Valley Railway, which is being built as an extension of the Virginia & Southwestern Railway, and now recognized as a Southern Railway enterprise. It is said that the new survey is prompted by Norman B. Ream and associates, who investigated the country in the early spring and who, it is further said, have purchased the charter of the proposed Knoxville & Eastern Railroad granted last year to William Epps and others. Mr. Ream is a director in the Seaboard. The survey in question is through the Holston River valley, and has been made very thoroughly. It extends from Moccasin Gap to Blaine, on the northern line of Knox county, Tennessee. The building of such a road by the interests backing the Seaboard would give a southwestern outlet for the immense quantities of coal to be developed by them in and around Toms Creek, Va., in what is known as the Clinchfield region, whither the South & Western Railway is now building.

In this connection it is of particular interest to quote a report from the Rutherfordton (N. C.) *Sun*, saying that construction is progressing rapidly on the line of the South & Western Railway from Alta Pass to Bostic, N. C., where connection will be made with the Seaboard Air Line. This work is to be completed by May 1 next, and night and day forces are

employed on the tunnels. It is expected to soon finish tracklaying on 16 miles of this line from Marion, N. C., and it is said that about 3000 men are at work between that city and Alta Pass, which is on the summit of the Blue Ridge, four miles from Spruce Pine, that for a long time was the southern terminal of the road. The newly-constructed line is said to be splendidly built, the grade being 22 feet wide and the track being laid with heavy steel rail. There are over 2000 ties to the mile. Two of the 17 tunnels are completed, and others have been bored through, although much work remains to finish them. These are all to be completed by April. Good progress is also reported on the bridges and culverts. The track is rock ballasted.

### Atlantic Coast Line Divisions.

The Atlantic Coast Line announces that on August 1 the system will be operated in four divisions, namely, the first division, W. H. Newell, general superintendent, Rocky Mount, N. C., consisting of the Richmond, the Norfolk, the Fayetteville and the Wilmington districts; the second division, A. W. Anderson, general superintendent, Florence, S. C., consisting of the Charleston, the Columbia and the Florence districts; the third division, J. N. Brand, general superintendent, Savannah, Ga., consisting of the Savannah, the Waycross, the Albany and the Montgomery districts; the fourth division, M. Riddle, general superintendent, Jacksonville, Fla., consisting of the Newberry, the Jacksonville, the Sanford, the Gainesville and the Lakeland districts.

### New Equipment.

The Atlanta, Birmingham & Atlantic Railway has filed an equipment agreement at Atlanta, Ga., covering 1200 drop-bottom coal cars of 80,000 pounds capacity, 500 box cars, 300 flat cars of 60,000 pounds capacity, 30 cabooses, 18 passenger and freight locomotives and 7 switching locomotives, the contract price being \$2,317,998.90. Delivery is to begin in August and is to be completed in November. The works at Waycross, Ga., have part of the order.

The Seaboard Air Line is reported to have sold \$300,000 of equipment certificates secured by 25 Baldwin locomotives.

The Long-Bell Lumber Co. of Kansas City has an order with the Beaumont Iron Works, Beaumont, Texas, for 200 logging cars.

### Lumber Road Extension.

Concerning a press report that the Finkbine Lumber Co. was building an extension, Mr. W. E. Guild, treasurer, writes from Wiggins, Miss., to the MANUFACTURERS' RECORD as follows:

"We are simply considering the extension of the main line of our logging road into our timber, about 20 miles. It is not incorporated, but is simply a logging line operated by the Finkbine Lumber Co., and the officers and directors are the same as of that company. We expect to make both connections, and do not expect to make it a common carrier."

The other officers of the Finkbine Lumber Co. are E. C. Finkbine, president; W. O. Finkbine, vice-president; K. E. Jewett, secretary.

### Elkins to Belington.

Mr. J. E. Morgan, general manager of the Elkins Electric Railway Co., Elkins, W. Va., writes the MANUFACTURERS' RECORD thus:

"The company will construct the line themselves. We propose, in addition to system in this city, to give the Tygarts Valley coal and coke regions rapid transit facilities by extending the line to Belington,

W. Va., a distance of 12 miles, and possibly farther."

The officers of the company are J. C. McSpadden, president; W. K. Taylor, secretary and treasurer; J. E. Morgan, vice-president and general manager. Taylor & Taylor of Elkins, W. Va., are the engineers.

### Fort Worth to Ceburne.

Mr. Walter Goodenough, Southwestern manager of the Stone & Webster Engineering Corporation, Wilson Building, Dallas, Texas, writes the MANUFACTURERS' RECORD relative to the construction of an interurban railway between Fort Worth and Cleburne, Texas. He says:

"We have made a number of preliminary surveys between these two points for the Northern Texas Traction Co. The exact location has not yet been decided. The line will traverse a rolling agricultural country, and 1 per cent. maximum grades will probably be adopted. Our Mr. E. C. Macy is the engineer in charge of this work."

### Americus Railway & Light.

Mr. W. A. Dodson, attorney-at-law, Americus, Ga., writes the MANUFACTURERS' RECORD that the petition to incorporate the Americus Railway & Light Co. is now pending, and charter will be granted about August 8. After that is done the company will organize and get to work. It proposes to put in a new electric power plant, four miles of street railway and electric pumps to deliver water into the city mains. The company has a contract with the city of Americus for 20 years, which has been voted on by the people, to pump water and light the streets.

### Railroad Notes.

There are nearly 3000 miles of main-line standard-gauge railroad in Oklahoma Territory, according to an official report from Guthrie. There are also 41 miles of street railway. Besides this, the steam roads have over 400 miles of side-track.

The Richmond & Chesapeake Bay Railway, Frank J. Gould's new electric line, has been opened for service from Richmond, Va., to Lakeside, five miles, and the entire line to Ashland, Va., which has been completed, is soon to be put in operation.

An officer of the Missouri Pacific Railway writes the MANUFACTURERS' RECORD thus: "Regarding extension from Bagnell, Mo., to Springfield, Mo., I wish to advise that construction of such extension is not contemplated by this company at the present time."

The Southern Railway is completing a large double-track cut near Canton, N. C., its extreme depth being 83 feet. It is more than 1000 feet long, and about 387,000 cubic yards of earth will be removed. This cut will give a better grade, and it may be finished by the middle of September. The Asheville Dray, Fuel & Construction Co. is doing the work.

It is rumored at Atlanta, Ga., that the interests controlling the Rock Island and the Frisco systems may acquire the Central of Georgia Railway, control of which was recently sold by the Southern Railway to Marsden J. Perry and Oakleigh Thorne. The Frisco, which extends as far east as Birmingham, could use the Central to reach the Atlantic coast.

Mr. J. M. Ross, Somerset, Ky., informs the MANUFACTURERS' RECORD that the Somerset Commercial Club has called a special meeting for the purpose of raising a subscription of \$40,000 to build a railroad from Somerset to the Cumberland river, seven and one-half miles. A 1½ per cent. grade has been surveyed. Mr. Ross also says that bonds to the amount of about \$75,000 will be sold.

## FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

## A Suggestion from Austria-Hungary.

M. Alschech (agency), IX Hahngasse 33, Vienna, Austria:

"I have a strong desire to work in earnest and with substantial profit throughout the Austrian empire for some of your American business houses. Manufacturing industries, railroad and commerce in general have been developing in a most extraordinary manner in Austria-Hungary. The highly-developed machine and tool industry of America does a great wrong—firstly, because it does not cause its products to be industriously pushed in our local market, and secondly, perhaps, because it makes its outlet in Austria-Hungary more difficult to reach, on account of failure to establish direct agencies and well-stocked warehouses here; and the American product, reaching us thus only through German hands, becomes higher in price and has lost its power to compete with other makes.

"I would suggest that 10, 20 or more American firms combine to equip here a suitable commission warehouse. For the individual the expense would not be great, for we would say these 20 firms should spend \$1000 each per year in Austria in order to do this. Now, these \$20,000 would suffice for the founding of a very satisfactory agency or representative house; if, however, the expenses were not quite covered the first year, the second year would surely result in a profit of decided character.

"We could consume here American machines and tools, but American manufacturers must have agencies with proper magazines in Vienna. Austrian factories and merchants buy foreign products very unwillingly if the opportunity for examination in person and for direct dealing with a known reliable agent of the foreign firm is not presented to them. Sales would be large if a sample machine were first set up in Vienna. Your enterprise looks toward assisting American producers to find an outlet for their goods; if you would fall in with my idea and work along that line you would certainly do your manufacturers a great service. I would like very much to take part in such an undertaking. I am thoroughly acquainted with our market, and could render valuable assistance beyond a doubt. The fact that I am favorably situated in a material sense and well known here and do a large business is ample guarantee to that end.

"N. Oest. Handels u. Gewerbskammer (North Austrian Chamber of Commerce) can answer inquiries satisfactorily so far as they concern me. I shall be happy to correspond with proper persons on the subject."

## Will Introduce American Products.

Kuhner, Henderson & Co., 115 Cannon street, E. C., London, England:

"Our Tenerife house has put itself in communication with the principal manufacturing firms of your country, and we enclose circular-letter addressed to them. If you think you can be of some assistance advise direct communication with them at Calle San Jose, Santa Cruz de Tenerife, Canary Islands."

The letter referred to is a general invitation to American manufacturers to correspond with Messrs. Kuhner, Henderson & Co. at their Santa Cruz offices in regard to the introduction of American products into the territory handled by the firm. It gives particulars of interest, including

mention of the new steamship line to begin sailings to the Canary Islands direct from the United States.

## Machinery Wanted in Austria-Hungary.

Heiman Manheim, Nizankow.s.e, Galizien, Austria-Hungary:

"I intend to make arrangements with American manufacturers and get actively to work provided your manufacturers are agreed among themselves to establish here a well-stocked branch, especially in agricultural implements and machinery, motors, automobiles and writing machines. With such an institution under five-year contract I would bind myself to look after its interests, and could assure them in that case a brilliant business. I would say, however, that I ought to have the foreign goods delivered on the spot duty paid; for instance, at Hamburg, the place I intend to select."

## France Needs American Copper.

P. F. Bergasse, 299 Rue Paradis, Marseilles, France:

"Try to connect me with American exporters of copper of all kinds—wires, bars, ingots or sheets. I am friendly acquainted with the most important French consumers, and can deal extensively with them in copper of all descriptions. I am about to establish my office in Paris in order to have consumers near at hand, and would greatly oblige could you refer to me some important American smelting and refining companies or with exporting dealers."

## Implements and Varnish for Argentine.

Auguste Boues, 21 Boulevard Perier, Marseilles, France:

"I leave on the 20th for the Argentine Republic, where I intend to establish myself as agent in the city of Buenos Aires. I would like to have agency for a maker of varnish and a maker of agricultural implements."

## Slot Machines for Germany.

Otto Waser, 2 Calvinstrasse, Berlin, N. W., Germany:

"I am open to represent in this market a manufacturer who can offer an automatic slot machine suitable for German coin."

The Cause and Extent of the Recent Industrial Progress of Germany. By Earl Dean Howard, Ph.D. Publishers, Houghton, Mifflin & Co., Boston. Price \$1 net.

This volume is one of the series of prize essays in economics founded by Messrs. Hart, Schaffner & Marx of Chicago, designed to draw the attention of American youth to the study of economic and commercial subjects and to encourage the best-thinking of the country to investigate the problems which vitally affect the business world of today. After discussing the main points of modern industrial progress the author contrasts economic conditions in Germany before 1871 with conditions that have developed since then and traces the latter in much detail to the industrial capacity of the German, industrial education, character of the workingman and the character of the German people as a whole.

The steamer Florida, built by the Maryland Steel Co. of Sparrows Point, Md., for the Baltimore Steam Packet Co., or Old Bay Line, has been launched. She is 306 feet in extreme length and 56 feet in extreme width, while the hold is 18 feet 1 inch deep. She is a screw steamer, and will be driven by a triple-expansion engine, for which steam will be furnished from four Scotch boilers. Her machinery will now be installed and she will be completed as speedily as possible.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

## Barringer Manufacturing Co.

The MANUFACTURERS' RECORD referred recently to Paul Barringer of Mt. Pleasant, N. C., as planning the establishment of a cotton mill at Rockwell, N. C. Mr. Barringer arranged last week to organize the Barringer Manufacturing Co. with a capital stock of \$150,000, and the plant will be equipped with 5000 spindles for manufacturing No. 30 two-ply skein yarns, looms to be installed and cloth manufactured later. Electric power will be used to drive the textile machinery, the electricity to be furnished from the water-power development of the Whitney Company of Salisbury, N. C., whose plant is at Whitney, 20 miles from Rockwell, and will be distributing power by next January. Messrs. Paul Barringer, J. W. Cannon of Concord, N. C.; C. M. Poole, J. M. Holshouser, Charles M. Klutz and others are the directors. Mr. Barringer will be president.

## Ware Shoals Manufacturing Co.

The MANUFACTURERS' RECORD is advised as to the present status of the Ware Shoals (S. C.) Manufacturing Co. enterprise, previously referred to several times. This company has practically completed buildings and has in position ready to operate the 20,000 spindles and 600 looms additional to the 30,000 spindles and 800 looms which have been producing. This will give the Ware Shoals plant a total of 50,000 spindles and 1400 looms in operation by October, as originally planned. Sheetings and drills are manufactured, from 500 to 600 operatives being employed. The company is capitalized at \$1,000,000, and Benj. D. Riegel is its president.

## The Lynchburg Hosiery Mills.

The Lynchburg Hosiery Mills of Lynchburg, Va., has been incorporated with an authorized capital stock of \$50,000 and the following officers: President, J. G. Burton; vice-president, R. C. Blackford, and secretary-treasurer, C. G. Burton. This incorporation continues the enterprise heretofore a partnership. About \$4000 has been expended for the erection and equipment of a small addition, but no further improvements are contemplated at present. The company is interested in placing a contract for 50,000 to 100,000 pounds of cotton yarn on cones in 12s and 14s, and invites correspondence in this connection.

## Baltimore Waste Manufacturing Co.

The Baltimore Waste Manufacturing Co. of Baltimore, Md., has been incorporated with capital stock of \$10,000 for manufacturing cotton, woolen, jute and other waste. Its incorporators are Messrs. Charles E. Egan, Garnett Y. Clark, Everett L. Blake and William J. Kelly. This company continues an established plant.

## Turner Mills Company.

The Turner Mills Co. of East Monbo, N. C., will be organized with capital stock of \$250,000 to purchase and develop water-power property on the Catawba river and build cotton factory for utilizing the power. Charter of incorporation was granted last week, the incorporators being Messrs. W. D. Turner, W. W. Tur-

ner, J. B. Armfield, J. C. Steele & Sons and others, all of Statesville, N. C.; A. A. Shuford of Hickory, N. C.; James L. Turner of Cooleemee, N. C., and others.

## Taylorsville Cotton Mills.

The Taylorsville Cotton Mills of Taylorsville, N. C., reported organized last week, has adopted plans and specifications for the erection of the necessary buildings for plant. Main structure will be 235 feet long by 75 feet wide; boiler and engine house, 40x50 feet, and cotton warehouse, 50x100 feet. The textile machinery will consist of 5000 spindles and accompanying apparatus for the manufacture of hosiery yarns, and manufacturing is expected to begin by March 1.

## Another Mill for Spartanburg.

It is proposed to organize a corporation to build another cotton mill at Spartanburg, S. C., and the equipment will probably be 10,000 spindles. The projectors are Messrs. John B. Cleveland, Elisha Bomar, Geo. S. Begg, Horace Bomar and others. Mr. Elisha Bomar is understood to be visiting New England with a view to interesting capitalists in the enterprise and arranging for the machinery.

## To Organize \$200,000 Company.

Plans are being formulated at Greelyville, S. C., for the organization of a company with capital stock of \$200,000 to build a cotton mill. A meeting of those interested was held during the past week and temporary organization was effected with T. W. Boyle, chairman, and J. F. Register, secretary. It is contemplated to arrange for erecting a 10,000-spindle plant.

## Paola Cotton Mills.

The Paola Cotton Mills of Statesville, N. C., has awarded contract to T. C. Thompson & Bros. of Birmingham, Ala., for erection of mill buildings. These buildings are for the Paola company's 5000-spindle cotton-yarn mill, details of which were stated last week. The capitalization of the new enterprise is \$110,000, and Eugene Morrison is president.

## Woolen Mill Proposed.

It is proposed to establish a woolen mill at Lebanon, Tenn., and W. E. Ligon is interested in the enterprise. He is desirous of corresponding with manufacturers of woolen-mill machinery.

## Textile Notes.

Mr. Davis George and brothers of Bessemer City, N. C., are reported as to build a cotton mill.

Reports state that J. J. Blackwelder of Newberry, S. C., and associates will build mill to spin cotton yarns.

Reports state that S. B. Wilkins of Cowpens, S. C., is completing arrangements for the erection of a cotton factory.

The Marion (S. C.) Manufacturing Co. states it is not true, as was rumored recently, that the company will build another mill.

It is reported that J. D. Pitts and associates of Glen Alpine, N. C., are organizing company to build cotton mill, to be operated by electricity.

Messrs. J. W. Ashhurst, W. M. Eubanks and T. G. Croft of Aiken, S. C., are interested in plans for organizing company to build a knitting mill.

The Crescent Manufacturing Co. of Spartanburg, S. C., has completed the installation of 30 additional knitting machines recently contracted for, and increased capacity from 7200 to 10,000 pairs of hosiery daily. It is reported the company will make further additions to its facilities.



The Mississippi cotton-mill owners have organized with Messrs. T. L. Wainwright of Stonewall, president; Thad Lampton of Magnolia, vice-president, and H. J. Ledyard of Tupelo, secretary-treasurer.

The Melville Woolen Co. of Fredericksburg, Va., has contracted for additional new machinery, including 15 looms, carding machinery, spooling frames and other apparatus. This mill employs 130 operatives.

The Bloomfield Manufacturing Co. of Statesville, N. C., is reported to have awarded contract to J. O. Gaither for the erection of an addition 90 feet long to present building, wherein there are 4700 spindles operating.

The Rockwood Mills, knitter of hosiery, Rockwood, Tenn., will probably make improvements to its plant, as mentioned last week. The company has appointed a committee to report September 5 on the advisability of enlarging and to what extent.

### Two New Companies.

At a meeting of the stockholders of the Associated Manufacturers of Cottonseed Products at Dallas, Texas, last week the following officers were elected: Jo W. Allison of Ennis, president; J. A. Underwood, Honey Grove, vice-president, and W. I. Yopp of Dallas, secretary-treasurer and general manager. This company has incorporated, with a capital stock of \$100,000, for the purpose of exporting lint, a product obtained at the cottonseed-oil mills by reginning the seed, and for the further purpose of increasing the foreign trade in cottonseed cake and meal. To facilitate its operations it proposes to erect warehouses at Dallas and Galveston in Texas; Hamburg, Germany; Naples, Italy, and at other American and European points.

The Maxton (N. C.) Oil & Fertilizer Co., which recently incorporated with a capital stock of \$100,000, has completed its organization by electing Messrs. J. W. Carter, president; T. O. Evans, vice-president, and W. H. Hisscox, secretary-treasurer.

### Roanoke.

The pamphlet setting forth the commercial, manufacturing, educational and general advantages of Roanoke, Va., mentioned some weeks ago by the MANUFACTURERS' RECORD as being in course of preparation by Secretary E. B. Jacobs, has been published in an attractive form by the Chamber of Commerce. As outlined in the MANUFACTURERS' RECORD, it not only contains valuable data of the results which have already been accomplished, but also treats at length the many resources and opportunities which this city possesses for the location and economical operation of varied industries. Many of the leading public and private buildings and important industries in and around the city are also illustrated and described. Altogether this pamphlet should prove an important factor both in familiarizing others with the progressiveness of its citizens and inducing them to investigate further Roanoke's situation for the upbuilding of profitable business undertakings.

### Appalachian Engineering.

The Appalachian Engineering Association will hold its summer meeting at Newport News, Va., on September 7. It has extended an invitation to be present to engineers visiting the Jamestown Exposition at the time. The officers of the association are Messrs. H. N. Eavenson of Cary, W. Va., president; B. Burleson of Welch, W. Va., vice-president; M. H. Mannakee of Williamson, W. Va., secretary, and R. H. Buchanan of Edgerton, W. Va., treasurer.

## MINING

### EAST TEXAS IRON.

#### Possibility of Great Development in That Field.

In some quarters there is an expectation that the State of Texas, having demonstrated the feasibility of manufacturing iron in Eastern Texas through the successful operation with convicts of a 50-ton furnace and pipe foundry at Rusk, may quit the industry, and that private parties will enter the field. A dispatch from Fort Worth to the *Times-Herald* of Dallas quotes J. L. Callanan, interested in iron and steel industries, as stating that the Star and Crescent and the New Birmingham iron companies, which have furnaces at New Birmingham, Texas, are making repairs which should be completed within a few months. It is said that cotton ties, for which there is a wide demand, will be among the leading outputs of the plants. Mr. Callanan says:

"The Rusk field has unlimited possibilities, and I believe that it will eventually be the location of iron works capable of competing for the business of the entire South. But there is one constant and serious impediment to its full development. There can be no mistaking the fact that in times of close selling private corporations cannot compete with the State, which has the great advantage of convict labor. Under the present situation the State gets all the labor needed at the cost of maintenance of convicts, which equals probably 75 cents daily, whereas a corporation is forced to pay from \$2.50 to \$10 per day for the same labor. Of course, the State, in cases of close figuring, could undersell the private concerns and put them out of business in periods of so-called hard times.

"Now the object for which the State entered the iron business at Rusk has been accomplished, namely, the demonstration of the utility of the iron-ore located there. The State never expects to develop the big field, and therefore it will be a great injustice to that community and to Texas as a whole for the State to keep piddling away upon a small scale when it is deterred to the full development of one of the biggest ore fields in the country.

"Capital, you know, is timid of investment, and it will require much capital to develop the Rusk fields. The State, of course is not going to engage in any such gigantic undertaking. For it to hold on to a few thousand dollars in profits while it makes capital fearful of the investment is not a situation that thinking minds foresee will continue long. I believe the State can sell its plant for a good figure, and it will not surprise me if some offer for it is presented soon."

### Sulphur at Sabine.

Shipments of sulphur through Sabine since May 1 up to the present date, according to the Beaumont (Texas) *Journal*, amounted to 36,700 tons, of which 4500 tons went to foreign ports and the rest to points along the Atlantic coast. These shipments through Sabine are steadily increasing.

In this connection a report by the British consul at Palermo is of interest. He says that the exports of sulphur from Sicily last year amounted to 17,500 tons, a decline of 23,200 tons as compared with 1905. His report continues:

"The obligatory syndicate for the control of the entire industry of the island was constituted by the Italian Government on August 1 last, and it was to this body that the Anglo-Sicilian Sulphur Co. had to sell its stock of sulphur at a price involving a loss to the company of \$1,450,000. The great problem the syndicate has to face is the competition of the United

States, an extraordinary development of the sulphur mines of Louisiana having occurred in recent years. Thus America, which at one time took a large proportion of the Sicilian output, now imports very little. The Italian Government sent two official missions to Louisiana to see what was being accomplished there and how it was done.

"The new syndicate has taken over some 350,000 tons of the stocks of the Anglo-Sicilian Sulphur Co.; it has to cope with an excess production of about 10 per cent. above the world's consumption, and also the practical loss of the United States market, which consumed about one-fifth of the total exports. These are conditions serious enough of themselves, besides having to grapple with the limitation of mining operations and consequent unemployment."

### Buys Coal Lands to Lease.

In a letter to the MANUFACTURERS' RECORD with information as to its purposes regarding coal lands recently purchased in Raleigh county, West Virginia, the Marsh Fork Coal & Land Co. of Fayetteville, W. Va., states that the property is located on Marsh fork of the Coal river, adjoining the lands of the Crab Orchard Coal & Land Co. It is said to be underlaid with a seam of New River smokeless coking coal of an average thickness of about five feet, and is accessible to both the Virginian and Chesapeake & Ohio railroads. The company proposes to lease the lands to an operating company for development. Officers of the Marsh Fork Coal & Land Co. are Messrs. C. T. Jones, president; J. S. Hill, vice-president, and E. L. Nuckolls, secretary and treasurer.

### Further Big Sandy Developments.

The MANUFACTURERS' RECORD is advised that E. F. Saxman, formerly of Latrobe, Pa., one of the well-known coke operators of Pennsylvania, has been engaged as president and manager of the Pike Coal & Coke Co. of Pikeville, Ky. This company is now developing coal lands in the Big Sandy district, and further developments are contemplated. The Big Sandy Company of Boston, Mass., and Pikeville, Ky., which controls extensive tracts of land in the Big Sandy district, is about to take up another lease opposite the Pike lease and organize a new company to make developments for a large coke operation. Mr. Saxman will be president of the new company also. His offices are at 1414 Commonwealth Building, Philadelphia, Pa.

### Another West Virginia Development.

The Premier Pocahontas Collieries Co. of Eckman, W. Va., lately incorporated with a capital stock of \$300,000, advises the MANUFACTURERS' RECORD that it will develop about 4000 acres of Pocahontas coal lands in McDowell county. It intends to open three mines and install improved electrical machinery for a capacity of from 2500 to 3000 tons of coal per day. Officers of the company are P. P. Flanagan, president and general manager; James R. Gillian, vice-president; T. D. Kauffelt, secretary, and Morris Watts, treasurer. Mr. S. H. Meem is the engineer in charge of operations.

### To Mine Virginia Copper.

Reports state that a number of Cincinnati (Ohio) capitalists holding options on about 5000 acres of copper-bearing lands in Rappahannock county, Virginia, intend to organize a company with a capital stock of \$1,000,000 to develop the property. Mr. Oliver E. Conner, Jr., a mining engineer of Cincinnati, is said to have investigated the lands with satisfactory results. In the event of the development of the property

it is stated that the copper will be sent to New York to be refined.

### Georgia Ocher.

Dr. Thomas L. Watson has had published under the auspices of the Geological Survey of Georgia a preliminary report on the ocher deposits of that State, the objects being to examine into the limits of the ocher belt and the complete economic importance of the deposits and to make as complete a report bearing on the geology of the deposits as the time allotted would permit.

### Opening Coal Mines.

A dispatch from Uniontown, Ky., states that the River & Rail Coal & Coke Co., which recently purchased the Davidson coal mines and acquired the coal rights on several thousand acres of land, has made preparations for sinking a new shaft and making other improvements. A large coal tippie, it is understood, will be erected at Uniontown to facilitate river shipments.

### Mining Notes.

Messrs. P. B. Adams of Sutton, W. Va.; Hanson Cogar of Levi and J. C. H. Cogar of Upper Glade are reported to have sold about 8000 acres of coal lands on the Holly and Elk rivers to Guy E. McCoy of Uniontown, Pa.

Shipments of coal to tidewater over the various coal-carrying roads during May, 1907, aggregated a total of 1,765,899 tons. As compared with shipments during the corresponding month in 1906, these figures show an increase of about 300,000 tons.

The Southern Coal, Coke & Lumber Co. of Oklahoma City, O. T., has incorporated with a capital stock of \$100,000. Its incorporators are Messrs. J. H. Patterson and E. V. Remington of Oklahoma City, and J. S. Cline and W. M. Hassler of Crab Orchard, Tenn.

Messrs. August W. McDonald, Cecil Stone, Henry S. Cato, J. S. Horan and Craig Ullman, all of Charleston, W. Va., have incorporated the Pittsburg Superior Coal Co. of Charleston, with a capital stock of \$300,000, to develop coal mines near Greendale, in Nicholas county.

The Pennsylvania Anthracite Coal Co. of Clarksville, Ark., has incorporated, with a capital stock of \$1,000,000, to develop coal mines near Spadra, Ark. Officers of the company are Messrs. James K. Gearhart, president; Fremont Stokes, vice-president, and C. H. Langford, secretary and treasurer.

### Greenville, N. C.

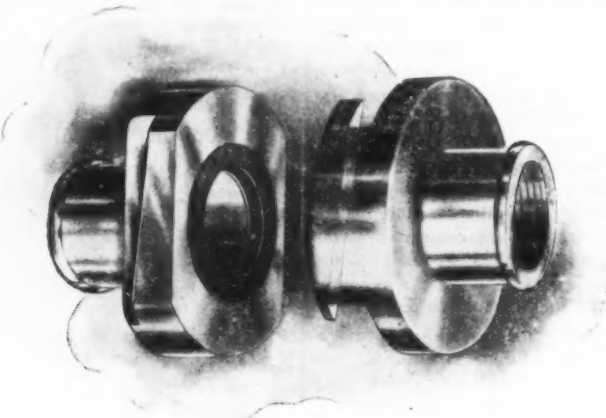
A special edition devoted to a greater city was recently published by the *Daily Reflector* of Greenville, N. C. Its achievements in the past, its standing today and its possibilities for future development along broader lines have all been interestingly told, and its leading financial, commercial and industrial enterprises, together with the principal business buildings and dwellings, have been described and illustrated. Attention is called to the opportunities existing at this time for the establishment of new industries, raw materials for which are amply available. These include a cotton mill, tobacco factory, fertilizer factory, woodworking plants of all sorts, cottonseed-oil mill and canning factories. Information along any of these lines will be furnished by the Chamber of Commerce, whose activity is well demonstrated in the large part played in successfully raising \$100,000 to secure the East Carolina Teachers' Training School.

Mr. Jay H. Northup of Louisa, Ky., desires to contract for the cutting, hauling and skidding of logs for at least 500,000 feet of lumber, and for sawing the timber into boards.

## MECHANICAL

### The American Coupling.

Two accompanying views illustrate the American coupling which is claimed to be an instantaneous coupling that can be used wherever the screw connection is used today. It is mechanically correct, based upon a fundamental mechanical



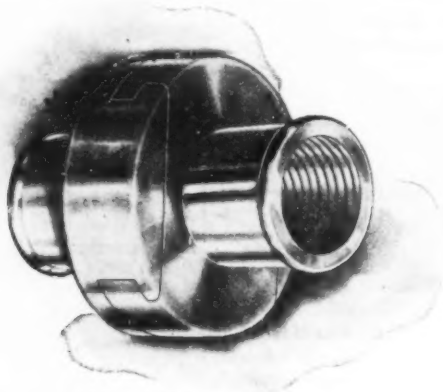
THE AMERICAN COUPLING.

principle. The force of gravity tightens the coupling, and any vibration has the same effect. This is a remarkable feature of importance in railroad work. The coupling automatically adjusts itself to changes in temperature, to the expansion of heat or contraction of cold, always remaining tight. From the construction of the coupling there is practically no

spondingly wide and heavy so as to make up for the lack of material made necessary by the opening. In the Clouser belt the teeth or the knuckles, as they are called, are on each link, while the sprocket contains depressions which receive the tooth of the link. It is thus possible to have a much narrower link in a chain without weakening its strength in the least. It

is shown by catalogues of the company that a half-inch chain is equal in strength to the old No. 42 style made by other methods, and the one-inch Clouser chain is equal in strength to the old style No. 83 style.

"It will be noticed that the teeth or knuckles engage the depressions in the sprocket in the same manner as the tooth



THE AMERICAN COUPLING.

wear, there are no threads to strip and the life of the coupling is long. The severest test of a coupling is its ability to successfully carry steam. The American coupling, it is claimed, is the only coupling that will carry high pressure of steam without waste. It is manufactured by the American Coupling Co., Pierce Building, St. Louis, Mo.

### Development of the Chain Drive.

It is of interest to note the development of the chain drive. Chain drives of the past have passed through sprockets with outward projecting teeth, necessitating depressions or perforations in each

of a pinion gear, i. e., rolling contact exists and not sliding contact.

"An accompanying view shows the flanges with which the sprocket wheels are cast and which guide the chain into place so that the tooth on the bottom of each link engages accurately with the corresponding depression in the run of the sprocket wheel.

"Another admirable feature of this chain is that it can be run as a cross belt upon centers distant four feet and over by means of the simple expedient of reversing every other link. This change can be made in a very few minutes by an unexperienced workman for the reason that



CLOUSER HIGH-SPEED CHAIN BELT.

link in order to accommodate the teeth of the sprocket.

The Clouser high-speed chain belt made by the Link Chain Belt Co., 52 Dey street, New York, is designed to obviate the difficulties of the old methods, and is described by the company as follows:

"Where the teeth of the sprocket must project into or through the link, it follows that the link must be made corre-

there are no pins, bolts or rivets in the entire make-up of the chain, there being but as many parts as there are links.

The construction, since it omits pins and rivets, is such as to render it self-cleaning, for through its entire operation dirt is thrown out from the wearing portions and not allowed to accumulate to the injury of the chain.

"The Clouser chain has been operated

on sprockets revolving as high as 950 R. P. M., and has also been operated at a one-half turn within 18-foot centers; also as a direct drive on motors within 17-inch centers. These chains are made in sizes from one-half inch up to two inches in width, and can be applied to all kinds of power transmission work such as driving counter shafts, concrete mixers, elevators, rock crushers and machinery for handling coal, coke, cement, ores, sand and other various propositions where power is to be transmitted."

### "Lightning" Concrete-Block Machine

Machinery for manufacturing concrete building blocks and kindred products is in greater demand every day. It is being given the attention of many builders of mechanical equipment, among those making a specialty of it being D. F. Detrick, Canal and East 3rd streets, Dayton, Ohio. The "Lightning" concrete-block machine is his design, and a view of it is seen in the accompanying illustration. It takes its name from rapidity of operation, and in describing it Mr. Detrick says:

"One man may easily turn out 200 blocks per day, doing his own mixing. In exhibition tests 13 blocks have been made in 10 minutes, and under very ordinary circumstances it is possible to deliver a block in about two minutes. After a block has been moulded only three movements are required to make a delivery; one withdraws the cores, the second turns the block from its normal face-down position to its side, the third releases the frame leaving the block resting on the pallet which is supported by a bracket.

"In the illustration is shown the block ready for bearing off with the pallet; the



"LIGHTNING" CONCRETE-BLOCK MACHINE.

supporting bracket is immediately underneath. When the pallet bearing the block is removed there is no surface exposed to which particles of concrete can adhere, thus in cleaning the machine any such portions will drop to the floor, preventing any clogging in any part.

"The face plate and the ends of the machine are hinged, presenting a perfectly true surface, and in preparing for successive blocks these three parts come together and lock of themselves. Investigation and hard usage have shown that there is no wear in these locks. One company has made something like 27,000 blocks on one of these machines, and at the end the doors locked just as securely as before, and the same smooth surface with sharp corners was present. The face plates are easily removable, five of them being supplied with each machine.

"Where solid blocks are desired the cores are readily detached and a simple device for closing the core holes is put into operation without the use of screws or bolts.

"Twenty-five pallets and a great variety of plates, end doors and other accessories are furnished with each machine."

### The "Perfect" Radiator Shield.

There is an increasing use being given to radiators, and as a consequence the accompanying parts and accessories are being improved from time to time to meet the demand for acceptable articles. Radiator shields are largely called for, and it is of interest to call attention to what is known as the "Perfect" radiator shield, of which an illustration is presented herewith. This shield is both useful and ornamental. It prevents blacking and soiling of the walls and ceiling and creates a better circulation of air in the room. It is a well-known fact that the black spots which usually show on the walls and ceilings



THE "PERFECT" RADIATOR SHIELD.

directly over a radiator are caused by the upward current of hot air carrying particles of dust. This annoyance is entirely avoided by the use of the shield herein mentioned, and its merits will be readily appreciated by those installing either steam or hot-water heating plants.

The half-back shield is provided with adjustable apron. Illustration shows the full-back shield.

Both patterns are provided with new fastening device which is neat in appearance, practical in construction, and only requires the use of a screwdriver to set complete in a minute's time.

These shields are made with double top, with air space between.

The "Perfect" radiator shield is manufactured by the Decatur Cornice & Roofing Co. of Decatur, Ill.

### Portland-Cement Plant Planned.

The MANUFACTURERS' RECORD is advised that the Piedmont Slate Co., recently incorporated, is planning to build a plant for the manufacture of Portland cement, the equipment to be installed in units, so that capacity can be increased from time to time as required by demands for the product. No machinery has been purchased, nor have any details been decided. Information and estimates are wanted on the necessary machinery, and correspondence can be addressed to E. C. Lester, company's secretary, 400 Austell Building, Atlanta, Ga.

### Wants to Represent Manufacturers.

Manufacturers who may contemplate arranging for representation in the territory tributary to Kansas City are invited to correspond with the Smart, Burnham & Evans Investment Co., Scarritt Building, Kansas City, Mo. The company recently incorporated, and states its management is thoroughly conversant with Western conditions and has an experienced force of salesmen to visit the territory. Address P. J. Evans, secretary.



# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

## ALABAMA.

Afton, Ala.—Sawmill.—Walter Gibbons will build sawmill and is reported to have purchased the machinery.

Andalusia, Ala.—Bottling and Ice Plant.—Charles Ellis is contemplating establishment of bottling plant and ice plant.\*

Birmingham, Ala.—Tool Manufacturing.—H. B. Van Decar and E. K. Plasecki (registered at the Florence Hotel) are endeavoring to interest capitalists in the establishment of plant to manufacture a combined anvil, vise, drill and pipe vise.

Camden, Ala.—Manufacturing.—Rock West Manufacturing Co. incorporated with capital stock of \$25,000 by W. P. Burford, L. J. Ervin, J. F. Harris, F. G. Hollinger and others.

Decatur, Ala.—Street Improvements.—City has let contract to Southern Bitulithic Paving Co. of Nashville, Tenn., for 31,000 yards of proposed paving; construction to begin September 15 and be completed December 15.

Decatur, Ala.—Sawmill.—Nebraska Cedar Co. has located mill for cutting timber into piling and blocks, and is now installing elevator and laying tracks.

Decatur, Ala.—Electric Power and Gas Plant.—R. A. Mitchell, Gadsden, Ala., and associates have purchased the Decatur Light, Power & Fuel Co., which includes the electric-lighting and gas plants of both Decatur and New Decatur, Ala., but not the street railway.

Florence, Ala.—Cyanamid Plants.—Incorporated: American Cyanamid Co., with capital stock of \$5,000,000. This company was reported in the Manufacturers' Record last May as being organized to establish plants for deriving nitrogen (for fertilizing purposes) artificially from the air. Frank S. Washburn of Nashville, Tenn., and Chas. H. Baker of New York are interested; New York offices at 100 Broadway.

Gadsden, Ala.—Iron Furnace.—Reported that the Quinn Furnace Co. contemplates replacing its present 50-ton iron furnace with a 125-ton stack. It is understood that control

of the company has been purchased, as stated some weeks ago, by St. Louis capitalists, among these being M. Paul Brown, S. M. Dodd, R. C. Kerens and others.

Jasper, Ala.—Development Company.—Incorporated: Long Development Co., capitalized at \$25,000, by R. W. Long, J. H. Bankhead and E. W. Long.

Jenifer, Ala.—Iron Furnace.—It is understood the Jenifer Iron & Coal Co. is planning to overhaul and improve Jenifer furnace and put it in operation. Company's coke ovens are now in operation.

Lafayette, Ala.—Road Improvements.—Chambers county will vote September 21 on the issuance of \$120,000 of bonds for road improvements. Address County Commissioners.

Mobile, Ala.—Sand Mines.—Incorporated: Jackson Sand & Gravel Co., by John L. Monahan, John H. Quill and J. Roberts Ennis; capital stock \$15,000.

Mobile, Ala.—Carriage Factory.—Willis A. Bigers has prepared plans for erection of carriage-manufacturing building 85x125 feet; two stories; brick stuccoed; mill construction. Structure will be equipped by Mack Carriage & Manufacturing Co.

Mobile, Ala.—Planing Mill.—Incorporated: Tacon Planing Mill Co., capitalized at \$10,000, by R. D. Jones, T. F. Roberts and Chas. Werneth.

Mobile, Ala.—Land Improvements.—W. A. Shriner, 100 St. Joseph street, and associates have purchased 2000 acres of land on the south shore of Bay Minette, near Mobile, for development. They plan to make improvements for streets and establish a residence and manufacturing town.

Mobile, Ala.—Cold-storage Plant.—Star Fish & Oyster Co. incorporated with \$100,000 capital stock to deal in fish, oysters, crabs, turtles and all sea foods; frame building 143x127 feet will be erected for ice and cold-storage; to have capacity of 25 tons ice; cost, with equipment, \$52,000; president, S. Gonzales; vice-president, J. E. Perez; secretary and treasurer, A. A. Perez; architect, S. Moll, Box 26; engineer, John Remy.

Selma, Ala.—Water-power Electrical Plant. Selma Street & Suburban Railway, F. M. Abbott, president, is reported as preparing to begin construction of proposed power plant previously noted. It is understood that a dam will be constructed on Mulberry creek in Autauga county to generate power, which will be transmitted by electricity for operating the company's railway and for lighting purposes.

Spring Hill, Ala.—Water-works.—J. B. Goodman Mercantile Co. proposed the installation of pneumatic tank system of water supply. No details decided and information is solicited.\*

## ARKANSAS.

Argenta, Ark.—Laundry.—Favorite Steam Laundry incorporated with \$10,000 capital stock; Frank N. Henderson, president; W. A. Stephens, vice-president, and W. F. Hardison, secretary-treasurer.

Arkadelphia, Ark.—Sewer Construction.—City has received plans and specifications for construction of 45,250 feet of proposed clay-pipe sewers and will open proposals August 15. Engineer in charge is Theo. Hartman, 1122 Center street, Little Rock; J. E. Callaway, chairman of committee, Arkadelphia.\*

Bentonville, Ark.—Cannery.—Arkansas Canning Co. incorporated with capital stock of \$25,000 by A. Bird, president; T. M. Wyatt, vice-president, and M. Bird, secretary-treasurer.

Clover Bend, Ark.—Cotton Gin.—J. W. Hindman and associates propose to build cotton gin.

Imboden, Ark.—Cotton Gin.—J. W. Hindman and associates of Clover Bend, Ark., propose to build cotton gin at Imboden.

Little Rock, Ark.—Grain Grader.—Hall Grain Grader Co., Winfield, La., is considering establishment of plant in Little Rock. Investing about \$15,000.

Little Rock, Ark.—Vending Machines.—Southern Vending Machine Co. incorporated with capital stock of \$20,000 and J. B. Avera president.

Fort Smith, Ark.—Veneer Factory.—American Veneer Co., Joseph Strand, president, has completed arrangements with Fort Smith Commercial Club for establishment of veneer factory.

Fort Smith, Ark.—Chair Factory.—Southwestern Chair Co. will establish chair factory (Dow-Eads) lately mentioned; to erect

60x180-foot building, another 44x140 feet and several others; to install machinery for manufacturing chairs; R. N. Dow, president; T. S. Eads, vice-president, and Geo. T. Sparks, secretary-treasurer.\*

Fort Smith, Ark.—Veneer Mill.—Reported that the American Veneering Co. of Indianapolis, Ind., will build veneer mill at Fort Smith.

Paragould, Ark.—Sewerage System.—City Council has ordered the installation of sewerage system and appointed commission to ascertain cost and award contracts for construction; committee, W. C. Hastey, R. W. Meriwether and T. B. Kitchen.

Paragould, Ark.—Water-works.—City will enlarge and improve its water-supply system. W. S. Luna is Mayor.

Pine Bluff, Ark.—Concrete Sidewalks.—Commissioners of Sidewalk, District No. 1, have decided to issue bonds for the proposed sidewalk improvements; plans will be prepared for concrete construction; probably about 80,000 square feet will be contracted for.

Pine Bluff, Ark.—Paving Contract.—City has awarded contract to Shelby & Petty at about \$35,000 for vitrified-brick paving for about 14 blocks of streets.

Spadra, Ark.—Coal Mines.—Incorporated: Pennsylvania Anthracite Coal Co., headquarters at Clarksville, Ark.; capital stock \$1,000,000; James K. Gearhart, president; Fremont Stokes, vice-president; C. H. Langford, secretary and treasurer.

Texarkana, Ark.—Publishing.—Valiant Publishing Co. incorporated with capital stock of \$25,000; G. E. Valiant, president; A. Allen, vice-president, and G. S. Valiant, secretary-treasurer.

## DISTRICT OF COLUMBIA.

Washington, D. C.—Tobacco-stemming Machine Plant.—Southern Stemming Machine & Manufacturing Co., recently reported as having been incorporated with capital stock of \$300,000 to manufacture tobacco-stemming machines, has organized with following officers: John O. Morris, 742 9th street N. W., Washington, D. C., president; M. D. Bailey, Jr., Winston-Salem, N. C., vice-president; T. C. Smith, Alexandria, Va., secretary and treasurer. The shops and principal offices will be located in Washington.

Washington, D. C.—Steam Laundry.—Elite Laundry, 43 G street N. W., has been incorporated with capital stock of \$25,000 to operate steam laundry by J. W. Lowe, W. N. Slack and G. A. Klinefelter.

Washington, D. C.—Ink Manufactory.—Antifraud Ink Co. has been incorporated with capital stock of \$100,000 to manufacture ink by C. G. Pfleger, president, 1967 Biltmore street N. W.; L. P. Krey, secretary, 933 Louisiana avenue N. W.; N. T. Engel and W. T. Carter.

Washington, D. C.—Ice Plant.—Washington Market Co., E. R. Tinker, president, Pennsylvania avenue and 7th street N. W., has about completed plans for the construction of large plate-ice plant previously reported to be erected in block bounded by E, F, 11th and 12th streets S. W.; structure to be three stories, 150x300 feet; brick and stone construction; cost about \$100,000. Latest improved machinery of the ammonia type will be installed. Later the company will also erect an ice-storage building 150x300 feet. Total expenditure for the enterprise will be about \$400,000.

Washington, D. C.—Railroad Shops.—Baltimore & Ohio Railroad Co., D. D. Carothers, chief engineer, Baltimore, Md., has awarded contract to Edward Brady & Son, 1109 Cathedral street, Baltimore, Md., for the construction of several buildings near Washington. Buildings include four-story brick, steel and reinforced concrete storehouse, 50x200 feet; one-story brick, steel and reinforced concrete power-house, 65x95 feet; oilhouse, 21x50 feet; steel carpet-cleaning shed, 25x50 feet, and three airing sheds 300 feet long. Plans and specifications were prepared by the engineering department of the company; cost \$200,000.

## FLORIDA.

Bowling Green, Fla.—Sawmill and Phosphate Plant.—Virginia-Carolina Chemical Co., Richmond, Va., has awarded contract for erection of sawmill and phosphate plant near Bowling Green to McAulay & Sons.

Esto, Fla.—Grist Mill and Gin.—John W. Aldridge is interested in the organization of the Esto Gin & Mill Co. to establish cotton gin and grist mill. (Lately mentioned.)

Greenville, Fla.—Sawmill.—Greenville Yel-

low Pine Co. will build sawmill; construction work has begun.

Jacksonville, Fla.—Dredging.—P. Sanford Ross, Inc., Savannah, Ga., submitted lowest bid, at \$3.03 per cubic yard, making a total cost of \$89,959, for dredging about 165,000 cubic yards of material from harbor; Francis R. Shunk, United States engineer in charge.

Jacksonville, Fla.—Paving.—Georgia Engineering Co., Frank R. Clark, president, Augusta, Ga., has contract at \$1.55 per square yard for paving Florida avenue, and D. M. Baker, at \$1.59 per square yard, for paving on Forsyth street; William H. Baker, Mayor.

Jacksonville, Fla.—Cigar Factory.—Cuesta, Rey & Co. of Tampa, Fla., now operating a small cigar factory, are planning to erect a larger plant.

Monticello, Fla.—Pecan Nut Cultivation.—Incorporated: North Florida Pecan Co., with capital stock of \$50,000; John Craig of Ithaca, N. Y., president and manager; J. L. Ebner of Vincennes, Ind., vice-president, and R. C. Simpson, Monticello, superintendent.

## GEORGIA.

Americus, Ga.—Bridge.—Seaboard Air Line Railroad states recent reports as to construction of bridge at Americus is not correct; bridge not contemplated at present.

Americus, Ga.—Electric Plant and Pumping Plant.—Americus Railway & Light Co., recently mentioned, states that after issuance of charter about August 8, organization will be effected and work outlined. Company proposes to install electric-power plant and electric pumps to pump water into city mains, having 20-year contract from city to pump water and light the streets. Details will be stated later. Address care of W. A. Dodson.

Americus, Ga.—Iron Foundry.—W. H. Sawyer & Sons, lately mentioned, will build foundry addition 70x90 feet for castings; building and equipment to cost \$5000.

Atlanta, Ga.—Terra-cotta Manufactory.—W. D. Hayes, 1124 Candler Building, is interested in plans for the establishment of a plant to manufacture hollow terra-cotta partition tile, building blocks, vitrified bricks, sewer pipes and other clay products.

Atlanta, Ga.—Portland-cement Plant.—Piedmont Slate Co., E. C. Lester, secretary, 400 Austel Building, plans to build plant for manufacturing Portland cement; no details have been decided; machinery will be wanted, probably in units, so that capacity can be increased from time to time as desired.\*

Augusta, Ga.—Paint Manufacturing, etc.—Incorporated: Augusta Paint & Wallpaper Co., capitalized at \$30,000, for dealing in and manufacturing paint, wallpaper, etc.; incorporators, Thos. P. Livingston, E. T. Heriot and J. R. Livingston.

Columbus, Ga.—Subway.—City Council will probably consider the construction of subway on East 11th street, to cost \$50,000. It is proposed that Council, County Commissioners and railroads share cost. Address the Mayor.

Dalton, Ga.—Steam Laundry.—Gem Steam Laundry, Ernest McDowell, proprietor, is considering establishment of branch laundry in Dalton.

Gainesville, Ga.—Fertilizer Factory.—W. W. Cooper, Flowery Branch, Ga., will establish fertilizer factory in Gainesville.

Juliette, Ga.—Milling Plant.—Juliette Milling & Glover Manufacturing Co. proposes to double capacity of warehouse and make other improvements in addition to adding eight rocks and three packers. Construction work is progressing on steel bridge across the Ocmulgee river which the company is building at a cost of \$18,000.

Macon, Ga.—Railway Shops.—Central of Georgia Railway Co. awarded contract to McKenzie-De Leon Construction Co. of Savannah, Ga., for erection of shop buildings for plant at Macon. This plant previously detailed, including statement as to contracts for machinery. Previous reports are that buildings will cost \$1,500,000, and equipment from one-third to one-half that amount; chief engineer of railway company, C. K. Lawrence; offices at Savannah.

Savannah, Ga.—Drainage System.—County Commissioners are planning future construction for drainage system, including erection of floodgate costing from \$5000 to \$6000 in Seventh district.

Senola, Ga.—Development Company.—Incorporated: Senola Development Co. by J. T. Arnall, C. F. Sasser, H. L. Ware and associates.

Senola, Ga. — Overall Factory. — Couch-Elder Manufacturing Co. will establish plant recently mentioned for the manufacture of overalls and back bands. Thomas B. Fox is secretary and treasurer; principal address, Atlanta, Ga.\*

Shady Dale, Ga. — Cotton Ginnery. — It is proposed to build cotton ginnery, and J. T. Mobley can be addressed for information.

Tifton, Ga. — Construction. — Incorporated: McCollough Construction Co., capitalized at \$50,000, by W. A. McCollough of Waycross, Ga.; W. T. Hargrett of Tifton, Ga., and C. J. Chenoweth of Savannah, Ga.; purpose, to take general construction contracts.

Tallapoosa, Ga. — Glass Works. — G. M. Greely, mentioned lately as buying the Dixie Glass Works, will organize Tallapoosa Glass Manufacturing Co. to operate the plant. Capital stock is \$25,000, but officers have not been elected. Plant is being prepared for operation, glass bottles to be the output.

#### KENTUCKY.

Ashland, Ky. — Sawmill. — W. R. Vansant will build sawmill to cut timber on 2000 acres of timber land recently purchased. It is understood he has contracted for the machinery.

Christiansburg, Ky. — Creamery. — C. B. Arnold, C. F. Beard and W. L. Brown have incorporated Christiansburg Creamery Co. with capital stock of \$5900.

Clinton, Ky. — Sewerage System. — City will arrange for constructing proposed sewers; about one mile 10-inch piping; managing officer, J. B. Evans.\*

Corydon, Ky. — Electric Plant, Flour Mill and Ice Plant. — Corydon Milling Co. will rebuild its burned plant, as stated last week; to erect main building of brick, 36x48 feet; engine and warehouse, 36x30 feet; equipment of machinery to have daily capacity of 100 barrels of flour; buildings and equipment to cost \$15,000; will also install six to eight-ton ice plant and 75-kilowatt electric-light and power plant; machinery to be purchased.\*

Craftsville, Ky. — Timber Lands. — George Hogg of Roxana, Ky., has purchased for future development 1000 acres of timber land near Craftsville.

Greenville, Ky. — Mills. — Greenville Milling Co. incorporated with capital stock of \$24,000 by J. W. Lam and C. W. Roark of Greenville and N. W. Eades of Paducah, Ky.

Guthrie, Ky. — Brick and Tile Works. — Guthrie Brick & Tile Manufacturing Co. incorporated with capital stock of \$3000; J. M. Robinson, president; J. E. Leake, vice-president, and R. F. Warren, secretary-treasurer.

Lexington, Ky. — Carriage Factory. — Chas. H. Frost and Chas. I. Gruss are reported as to establish carriage factory.

London, Ky. — Water-works. — London Water-Works Co. has been organized and awarded contract to Alex. T. Wilson, Barbourville, Ky., for drilling wells in East London to establish water-works.

Louisville, Ky. — Saw and Planing Mill. — Concher Mill & Lumber Co. has its proposed plant partly in operation; is building saw and planing mill to have daily output of 30,000 feet of lumber; building one story high, 100x60 feet; ordinary fireproof construction; to cost \$5000 for buildings and machinery; W. H. Concher, 725 East Washington street, in charge.

Louisville, Ky. — Water-works. — In addition to pump to be installed at the river station at a cost of \$250,000, recently mentioned, Board of Public Works will probably install similar pump at Crescent Hill Station of the Louisville Water Co., to have a daily capacity of between 24,000,000 and 30,000,000 gallons; Charles Hermans, chief engineer of water company.

Paducah, Ky. — Iron Foundry. — Lack Malleable Iron Co. has under construction its proposed foundry previously announced; brick construction; 70x150 feet; cost \$20,000; product, malleable iron.

Pike County, Ky. — Coal Mines. — Freeburn Coal & Coke Co. is enlarging its coal-mining operations and has arranged for a second mine to be producing by October 1; output of both mines will be 1000 tons daily. Capital stock will be increased from \$300,000 to \$400,000 and the additional capital is to be paid in as needed for additional improvements; Frank P. Harman, president; main offices at Lynchburg, Va.; W. A. Young, assistant secretary, at mines; postoffice, Edgerton, W. Va.; properties located in Pike county, Kentucky.

Pikeville, Ky. — Coal Mines and Coke Ovens. — Big Sandy Company of Boston, Mass., and Pikeville will take up another coal-land lease and organize a new company to undertake developments for a large coke operation. E. F. Saxman, 1414 Commonwealth Building, Philadelphia, Pa., will be president.

Sergeant, Ky. — Timber Development. — Reported that W. Finley Bentley, Horn, Ky., has purchased 2000 acres of timber land near Sergeant for development.

Somerset, Ky. — Road Improvements. — Pulaski county bond issue for \$200,000, lately voted, will be expended to build 125 miles of stone and gravel turnpike; W. L. Barrett, county judge.

Uniontown, Ky. — Coal Mines. — River & Rail Coal & Coke Co., which recently purchased the Davidson mining property and mining rights on several thousand acres of land, has begun preparations to develop. A new shaft is being sunk and other improvements will be made.

#### LOUISIANA.

Baton Rouge, La. — Lumber. — Baton Rouge Lumber Co., Ltd., incorporated with \$6000 capital stock to establish saw and planing mill, with box factory addition, by C. C. Bird, W. P. Connell and Gustave Lemle.

Bogalusa, La. — Ice Plant. — M. K. Pearce of Whitecastle, La., will build ice plant of 50 tons capacity at Bogalusa.

Bogalusa, La. — Lumber Plant. — W. P. Stewart, Jr., E. C. Rowan, W. B. Perry, Robert Arnold, J. W. Rowan and H. P. Ficken have incorporated Bogalusa Lumber Co. with capital stock of \$10,000 to manufacture flooring, ceiling, shingles, staves, laths, etc.

Colfax, La. — Drykiln. — Iatt Lumber Co. will build drykiln and sheds.

Crowley, La. — Syrup Mill. — Alexander Mouton of Lafayette, La., plans, as stated lately, to establish syrup mill. He contemplates erecting a frame building 100 feet square, one-fourth of this to be one-story high, and shed 40x75 feet, to cost, with equipment, about \$30,000. Machinery will include three return tubular boilers, 72x18 inches, to consume bagasse, coal or oil; three-roller mill, 30-inch diameter, 60 inches long; 18x42-inch heavy-duty Corliss engine, etc.

Hammond, La. — Bridge Construction. — O. G. Robinson of Kansas City, Mo., who has contract for building the trestle bridges on the Baton Rouge, Hammond & Eastern Railroad, has established offices at Hammond to facilitate purchase of materials and handling labor. About 3,000,000 feet of lumber will be required for his contract.

Homer, La. — Water-works. — City has awarded contract to O'Neil Engineering Co. of Dallas, Texas, for construction of its proposed water-works to cost about \$35,000. Plans are being prepared and bids for machinery and construction supplies will soon be invited.\*

New Orleans, La. — Ice and Cold-storage Plant. — Retailers' Ice & Cold Storage Co., lately reported incorporated, will build plant of 100 tons capacity, expending \$100,000 for buildings and equipment; engineer or architect not engaged; F. Clay Viguerie, 504 Poydras street, president.

New Orleans, La. — Woodworking Plant. — American Manufacturing Co., 2101 Louisiana avenue, is preparing to expend several thousand dollars for erecting additions and installing new machinery.

Robeline, La. — Saw and Planing Mill. — Caldwell-Logan Company, Ltd., incorporated with \$50,000 capital stock to establish saw and planing mill. Charter provides that company shall have authority to purchase property of the Robert-Smith Lumber Co.; J. L. Logan, president; J. E. Caldwell, vice-president, and T. J. Caldwell, secretary-treasurer.

Stark, La. — Saw and Shingle Mill. — W. H. and H. G. Taliaferro of Saratoga, Texas, are reported as to build sawmill with daily output of 20,000 feet of lumber and shingle mill with daily output of 50,000 at Stark.

#### MARYLAND.

Baltimore, Md. — Waste Manufacturing. — Incorporated: Baltimore Waste Manufacturing Co., with capital stock of \$10,000, to manufacture cotton, woolen, jute and other wastes. Incorporators: Charles E. Egan, Anna May Egan, Garnett Y. Clark, Everett L. Blake and William J. Kelly; offices at 301-303 East Falls avenue.

Baltimore, Md. — Bakery Combination. — Maryland Biscuit Co., 516-532 South Charles street, and a number of other bakeries in various parts of the country are forming a \$30,000,000 corporation to be known as the General Biscuit Co. Michael J. Fitzsimmons, president of the Maryland Biscuit Co., will probably be vice-president of the new company.

Baltimore, Md. — Wagon Factory. — Leonhardt Wagon Manufacturing Co., coach, wagon and truck builders, 412-420 East Saratoga street, has been incorporated with capital stock of \$50,000 by Wm. Leonhardt, John H. Leonhardt, Edward M. Leonhardt, George F. Faust and Wm. J. McLaughlin.

Baltimore, Md. — Cigars. — Crawford County Cigar Co. has been incorporated to deal in cigars, cigarettes, etc., by George Macomber, 848 West Lombard street; Frank Culotta, Samuel Culotta, Ferdinand Denhard, 619 South Canton street, and Wm. F. Broening.

Baltimore, Md. — Printers' and Bookbinders' Machinery. — J. S. King Machine Co., manufacturer of printers' and bookbinders' machinery, 213-215 North street, will hold meeting of stockholders to ratify increase of capital stock to \$6000.

Baltimore, Md. — Suburban Development. — Wylie Heights Co., Dr. Charles G. Hill, president, 819 Park avenue, has purchased 125 acres of land on old Pimlico and Green Spring roads and will develop it for residential purposes.

Bloomington, Md. — Coal Mines. — George C. Pattison is reported as to develop coal mines.

Bloomington, Md. — Coal Mines. — Bloomington Coal Co. incorporated by Thomas B. Davis, Brydon Bros. and others to mine coal. William Phillips, Simpson, W. Va., is in charge.

Cumberland, Md. — Lumber. — Croft Lumber Co. incorporated with \$100,000 capital stock by A. A. Doub and P. C. Barnes, Cumberland; R. A. Ravenscroft, Oakland, Md., and others.

Highfield, Md. — Oil Wells. — South Maryland Oil & Development Co. organized to drill for oil by S. E. Cann of Waterbury, Conn.; G. C. Oviatt of Smethport, Pa., and others.

Lonaconing, Md. — Printing Plant. — J. J. Robinson will erect printing plant and residence; building to be 40x60 feet; two stories; brick construction; slate roof; steam-heating plant; electric-lighting fixtures; to install 8 or 10-horse-power engine; boiler for engine and heating; building and equipment to cost \$7000; contractor, Olin Gerlach, Frostburg, Md.; some machinery not yet purchased.\*

#### MISSISSIPPI.

Batesville, Miss. — Cotton Gln. — Incorporated: Batesville Gln Co., capitalized at \$12,500, by M. D. Landau of Vicksburg, Miss.; G. R. Houston and E. D. Seymour of New York.

Greenville, Miss. — Water-works Improvements. — The city is now proceeding with its proposed water-works improvements, including the erection of an additional building, the installation of 3,000,000-gallon pump and an air compressor, and extension of water mains; cost to be about \$20,000; contracts have been awarded; William Yerger, Mayor.

Hattiesburg, Miss. — Electric-light Plant. — Union Electric Co. incorporated with \$5000 capital stock by A. N. Sexton, C. J. Sutherland, W. H. Mace and others.

Hattiesburg, Miss. — Engine and Sawmill Works. — Watkins Machinery & Foundry Co. is now building stationary engines and sawmill machinery, the engines being from 25 to 100 horse-power of balanced slide-valve, center and side crank type. This company operates a general foundry and machine plant.

Holly Springs, Miss. — Cotton Gln. — Incorporated: Draper-Mason Cotton Co., with capital stock of \$10,000, by L. B. Draper of Holly Springs, T. M. Jones of Decatur, Ala., and others.

Lake, Miss. — Quarries and Stone Manufacturing. — Lake Stone & Manufacturing Co. is being organized by William Cornell and J. R. Davis of Lake, E. W. Francisco of Holly Springs, Miss.; E. D. Osborn of Forest, Miss., and others, to develop quarries and manufacture stone; capital stock \$60,000.

Lexington, Miss. — Cotton Gln. — Incorporated: Farmers' Gln Co., capitalized at \$10,000, by M. D. Landau of Vicksburg, Miss.; E. D. Seymour and G. R. Houston of New York, and others.

Lexington, Miss. — Cotton Gln. — Farmers' Gln Co. incorporated with \$10,000 capital stock by M. D. Landau, E. D. Seymour and others.

#### MISSOURI.

Baleshed, Miss. — Levee Work. — O. A. Gibson, Donovan & Daley, Vicksburg, Miss., have contract at 19¢ cents per cubic yard to construct 120,000 yards of levee work at Stack Island.

Bismarck, Mo. — Iron Mines. — Reported that W. H. Smollinger of Bismarck and Pittsburg (Pa.) capitalists will reopen the Iron Mountain ore property.

Branson, Mo. — Mining. — Carbonate Mountain Mining & Lumber Co. incorporated with capital stock of \$75,000 by A. R. Deacon, Jonathan W. George and Chas. B. Todd.

Bunker (not a postoffice), Mo. — Sawmill, etc. — Bunker-Culler Lumber Co. of Springfield, Mo., has purchased 40,000 acres of timber land in Shannon, Dent and Reynolds counties, Missouri, and is erecting sawmills near Bunker to have a total daily capacity of 100,000 feet of lumber. S. J. Bunker, pres-

ident and general manager, is in charge; S. L. Culler, secretary.

Hattiesburg, Miss. — Electric-light and Power Plant. — J. P. Carter, C. H. Lindsley and others have organized company and applied for 25-year franchise to construct electric-light and power plant.

Hattiesburg, Miss. — Water-works Improvements. — City is considering proposed improvements to water-works, which will probably include enlargement of present 140,000-gallon retaining tank or construction of additional reservoir, increasing water supply to about 1,000,000 gallons; extension of present stand-pipe and enlargement of power-house. Plans will soon be prepared. A bond issue of \$25,000 has been voted for improvements to water-works; Burk Jones, superintendent water-works. (Referred to February 21.)

Joplin, Mo. — Mining. — Berlin Mining Co. incorporated with \$50,000 capital stock by W. H. Hackett, C. Hinkley and O. Hood.

Joplin, Mo. — Zinc Mines. — Incorporated: Lehigh Zinc Mining Co. with capital stock of \$50,000 by H. A. Ayers, O. L. Steele, J. P. Pearson and others.

Joplin, Mo. — Mining. — Berlin Mining Co. has been incorporated; W. H. Hackett, president. A 200-ton concentrating plant will be erected at cost of \$25,000 for the production of zinc concentrates.

Kansas City, Mo. — Ice Plant. — J. W. Shores contemplates the erection of ice plant.

Kansas City, Mo. — Construction. — Clay Construction Co. incorporated with capital stock of \$5000 by Michael Sweetman, Edwin J. Becker and Armwell L. Cooper.

Kansas City, Mo. — Sand Mining. — Incorporated: Interstate Sand Co., capital \$15,000, by C. B. Ashbaugh, William Heagy, C. F. Smythe and others.

Laurel, Miss. — Naval-stores Plant. — De Soto Naval Stores Co. of 212 East German street, Baltimore, Md., and Lynchburg, Va., has completed arrangements to build at Laurel a plant for manufacturing turpentine, rosin, paper pulp, etc., from long-leaf yellow pine, and it is understood that \$50,000 will be invested. Reference was made recently to purchase of site at Laurel, and full particulars of the organization of the company were given some weeks ago; George A. Kerr, general manager in charge of mechanical department, has his offices at Lynchburg.

Oseola, Mo. — Dam Construction. — City has voted \$9000 of bonds to build proposed dam across the Osage river to develop water-power for industrial purposes, making the river navigable at all seasons as far as Taberville, Mo.; total cost about \$25,000. (Referred to May 2.)

Princeton, Mo. — Lumber. — T. W. Ballew Lumber Co. incorporated with \$1,000,000 capital stock by Thomas W. Ballew, Edward Hollister, James W. Hayes and others.

St. Louis, Mo. — Leather Factory. — J. W. Schloeman Leather Co. incorporated with \$60,000 capital stock by John William Schloeman, Otto H. Schloeman, Edward R. Sewing and others.

St. Louis, Mo. — Machinery Manufacturing. — Compressed Air & Vacuum Machinery Co. has increased capital stock from \$120,000 to \$250,000, of which about \$200,000 will be used in construction of new factory, 135x309 feet; office building will cost \$15,000; John S. Thurman, president and general manager. (Referred to June 27.)

St. Louis, Mo. — Metalware Factory. — Incorporated: St. Louis Metalware Co., by Walter Wimmer, George Swenhardt and John D. Dalton, to manufacture sheet-metal goods; capital stock \$9000.

St. Louis, Mo. — Bakery. — Perry-Whiting Pie Co. incorporated with \$38,000 capital stock by John W. Gillespie, Joseph T. Newell, R. C. Kellogg and Frank C. Whitney.

St. Louis, Mo. — Hardwood Specialties. — Premium Hardwood Co. incorporated with \$25,000 capital stock by Paul Brown, S. H. Wright and Walter Bail.

St. Louis, Mo. — Plumbing. — Chard-Ratz Plumbing Co. incorporated by William A. Chard, Henry Ratz, J. B. Chard and A. Ratz.

St. Louis, Mo. — Clothing Manufacturing. — Incorporated: Monarch Cloak & Skirt Co., to manufacture clothing, by D. Grossman, S. Silberman and S. Sussman; capital stock, \$2500.

St. Louis, Mo. — Steel Works. — Incorporated: O. K. Harry Steel Co. with capital stock of \$40,000 by French L. Nelson, Wyand Nelson, Lily B. Nelson and others.

St. Louis, Mo. — Tubing and Supplies. — Excelsior Tube & Supply Co. incorporated with \$5000 capital stock to manufacture and deal in steel tubing, automobile and sewing machine supplies by William C. Shramm, Frank W. Shramm, Fred W. Shramm, all of St. Louis; George T. Robie, Fred C. Robie and others, all of Chicago, Ill.\*



St. Louis, Mo.—Foundry.—A. Gilbert & Sons Brass Foundry Co. has purchased 75x 100-foot site for erection of proposed foundry addition. A. W. Black Construction Co. is preparing plans and specifications for one-story structure, with two-story front; first floor for foundry; second floor for offices; saw-tooth roof; 18,000 square feet of skylights; roof supported by iron beams; no pillars to be used; foundry department will be equipped for manufacturing railroad brasses, bronze, aluminum, babbit metal, solder and bar lead, etc.; cost of building and equipment about \$25,000.

#### NORTH CAROLINA.

Asheville, N. C.—Timber-land Development. Powell-Murray Land & Timber Co., reported incorporated recently with \$50,000 capital stock, has purchased 4000 acres of timber in McDowell county, but will not develop at present; Geo. A. Murray, president; B. B. Blackwelder, secretary-treasurer.

Bessemer City, N. C.—Cotton Mill.—Davis George and brothers are reported as to build cotton mill.

Canton, N. C.—Shuttle-block Factory.—J. M. Torrence is reported as to establish shuttle-block factory.

Cary, N. C.—Planing Mill.—Wilkinson Lumber Co., recently reported incorporated, will erect planing mill 50x124 feet, with kilns and other buildings; cost about \$10,000; material and machinery partly contracted for; product, rough and dressed lumber, 15,000 to 20,000 feet per day; T. F. Wilkinson, secretary, treasurer and general manager.

Cooleemee, N. C.—Brick Works.—Cooleemee Brick Co., recently reported incorporated with \$25,000 capital stock, will operate works with daily output of 20,000 plain bricks; cost of buildings and equipment \$3000. Baxter Byerly is managing officer.

East Monbo (not a postoffice), N. C.—Cotton Mill.—Incorporated: Turner Mills Co., with capital stock of \$250,000, by W. D. Turner, W. W. Turner, John G. Turner, J. C. Steele & Sons, all of Statesville, N. C., and others. Company proposes to purchase and develop water-power on the Catawba river and build cotton mill to utilize the power. Address company, care of W. D. Turner, Statesville, N. C.

Elizabeth City, N. C.—Sawmill.—Dare Lumber Co. awarded contract for machinery and will begin erection of proposed fireproof concrete mill to be operated by electricity. Work has begun on clearing, grading and driving piling preparatory to erection of office building and other structures. Company controls 167,000 acres of timber land in Dare county, and is building wharves and constructing five-mile steam railway for transferring timber from forests to water's edge and latter to plant in Elizabeth City; main offices, Blinghamton, N. Y. (Referred to May 2.)

Filbertville (P. O. at Canton), N. C.—Water-works, Electric-light Plant, etc.—Champion Fiber Co. is proceeding with improvements to establish town in connection with its previously announced plans for building a paper-pulp mill to cost \$1,000,000. This plant was previously detailed in the Manufacturers' Record. Preparations are being made to complete the installation of the water-works and the electric-light plant.

Glen Alpine, N. C.—Cotton Mill.—J. D. Pitts and associates reported as organizing company to build cotton mill to be operated by electricity.

Greensboro, N. C.—Water-plant Improvements.—Water and Light Commission has asked for a bond issue of \$65,000 to complete water-works. Address The Mayor.

Henderson, N. C.—Mattress Factory.—Establishment of mattress factory is proposed, and R. B. Powell is interested. No machinery has been purchased.

Hickory, N. C.—Electric and Steam Plant.—Reported that Claremont Female College, W. B. Duttons, president, will install electric-light plant and steam-heating equipment.

Littleton, N. C.—Manufacturing.—Sterling Manufacturing Co. is reported as to enlarge plant and add new machinery.

Maxton, N. C.—Cottonseed-oil and Fertilizer Plant.—Maxton Oil & Fertilizer Co., reported incorporated April 18 with \$100,000 capital stock, has elected J. W. Carter president, T. O. Evans vice-president and W. H. Hisscox secretary-treasurer.

Murfreesboro, N. C.—Telephone System.—North State Telephone Co., L. J. Lawrence, president, has increased capital stock from \$10,000 to \$25,000.

Raleigh, N. C.—Barytes Mining.—Carolina Barytes Co. increased capital stock from \$30,000 to \$40,000.

Rockwell, N. C.—Cotton Mill.—Barringer Manufacturing Co. incorporated with capital stock of \$150,000 to build yarn mill of

5000 spindles; looms to be added in the future; to operate by electric power. Directors: Paul Barringer (president) of Mt. Pleasant, N. C.; J. W. Cannon of Concord, N. C.; Albert Peeler of Rockwell and others. (Mr. Barringer has been previously referred to as planning a mill company.)

Salisbury, N. C.—Water-works, Sewers, etc. City will vote in October on issuing \$300,000 of bonds to pay floating indebtedness, extend water-works system and sewers and improve streets. Address The Mayor.

Sanford, N. C.—Ice Plant.—Incorporated: Buffalo Ice & Coal Co., with capital stock of \$100,000, by T. L. Chisholm, D. E. McIver and others. This is the company referred to last week as being organized.

Smithfield, N. C.—Milling.—Neuse Milling Co. incorporated with \$50,000 capital stock for manufacturing feedstuffs from various grains. Incorporators: J. R. Wolverton, W. K. Austin, J. D. Spliers, F. K. Broadhurst and others.

Statesville, N. C.—Cotton Mill.—Paola Cotton Mills has awarded contract to T. C. Thompson & Bros. of Birmingham, Ala., for erection of mill buildings for proposed 5000-spindle mill. Paola Company was previously reported organized, etc. Eugene Morrison is president.

Statesville, N. C.—Cotton Mill.—Reported that Bloomfield Manufacturing Co., operating 4700 spindles, has awarded contract to J. O. Galther for erection of 90-foot addition.

Sylva, N. C.—Furniture Factory.—Sylva Furniture Co., reported incorporated last week with \$20,000 capital, has bought site and will erect mill building to be equipped for manufacturing furniture suites. Plans and specifications are being prepared. Address T. C. Bryson.

Taylorsville, N. C.—Cotton Mill.—Taylorsville Cotton Mills, lately reported organized with \$100,000 capital stock, will erect main building 75x235 feet, boiler and engine-house 40x50 feet and cotton warehouse 50x100 feet. W. R. Matheson is president and Fred H. White of Charlotte, N. C., manager.

#### SOUTH CAROLINA.

Abbeville, S. C.—Ice Plant and Laundry.—Abbeville Ice, Laundry & Fuel Co. will build ice plant with daily output of 10 to 15 tons and a steam laundry; buildings and equipment to cost from \$10,000 to \$15,000. Machinery has not been purchased. Address Geo. M. Beasley. (Referred to last week under Chester.)

Alken, S. C.—Knitting Mill.—J. W. Ashurst, W. M. Eubanks and T. G. Croft are interested in organizing company to build knitting mill.

Anderson, S. C.—Steam Laundry.—V. Motte Barnes is interested in plans for establishment of steam laundry.

Charleston, S. C.—Fertilizer Factory.—Combahie Fertilizer Co. is said to be planning the erection of fertilizer factory to replace plant burned several months ago.

Cowpens, S. C.—Cotton Mill.—Reported that S. B. Wilkins is completing arrangements for the erection of a cotton mill.

Greenville, S. C.—Cotton Mill.—T. W. Boyle, J. F. Register and associates will organize company with capital stock of \$200,000 to build cotton mill of 10,000 spindles.

Laurens, S. C.—Steel Viaduct.—Charleston & Western Carolina Railroad will build steel viaduct over South Tyger river between Laurens and Spartanburg; G. G. Lynch, general superintendent, Augusta, Ga.

Newberry, S. C.—Cotton Mill.—Reported that J. J. Blackwelder and associates will build mill to spin cotton yarns.

Spartanburg, S. C.—Knitting Mill.—Reported that the Crescent Manufacturing Co. will enlarge its plant.

Ware Shoals, S. C.—Cotton Mill.—Ware Shoals Manufacturing Co. has completed all buildings and is installing machinery to give total of 50,000 spindles and 1400 looms by October 1. Company has been operating 30,000 spindles and 800 looms, and enlargement brings plant to originally-planned equipment; Ben D. Riegel, president.

#### TENNESSEE.

Arlington, Tenn.—Cannery.—Arlington Canning Co. incorporated with \$10,000 capital stock by W. S. Woodside, A. H. Murray, P. M. Stewart and others.

Chattanooga, Tenn.—Medicine Manufacturing.—Incorporated: Breeden Medicine Co., by C. C. Breeden, J. E. Ramsey, F. C. Enloe, W. G. M. Thomas and L. M. Thomas; capital stock \$50,000.

Crossville, Tenn.—Fireproof Construction.—Organized: Southern Fireproof Construction Co., with Wm. Jarrett building manager, W. B. Allred assistant and J. S. Reed secre-

tary-treasurer. Purpose, to take contracts for fireproof construction of buildings.

Dyersburg, Tenn.—Cotton Gin.—Finley Gin Co. incorporated with \$7000 capital stock by J. P. Story, W. H. Reed, J. N. Norris and others.

Flippin (P. O. Ripley), Tenn.—Cotton Gin. Flippin Union Gin Co. incorporated with \$6000 capital stock. W. F. Carmack is president, J. A. Hendren secretary and M. F. Savage manager.

Etowah, Tenn.—Reservoir.—Louisville & Nashville Railroad Co. contemplates expenditure of \$20,000 in improvements to natural land basin recently noted purchased for reservoir; capacity will be 84,000,000 gallons; water to be used in shops of the company at Etowah, also for supply for the town. (Mentioned last week.)

Howell, Tenn.—Water-works.—A. P. Taylor & Co. will construct water-works for city; 40-foot tower will be erected and tank with 5000 gallons capacity.

Johnson City, Tenn.—Sawmill.—Alfred Gilmer will build sawmill to cut the timber on 230 acres of land recently purchased.

Knoxville, Tenn.—Furniture.—Incorporated: Moore Furniture Co., capitalized at \$25,000, by G. L. Moore, W. L. Hall, P. S. McMillen and others.

Knoxville, Tenn.—Water-power Electrical Plant.—Knoxville Power Co. is understood to be preparing to begin construction this fall on its proposed water-power electric plant, previously mentioned. This proposition involves the construction of a dam 80 feet high and 500 feet long, a tunnel 5700 feet long and three miles of canal, to develop 40,000 horse-power to be transmitted by electricity for power and lighting. The plant will be located on Little river, 40 miles from Knoxville. Chas. H. Treat, Washington, D. C., is company's president. John T. Wilder, Knoxville, is general manager.

Knoxville, Tenn.—Stove Foundry.—Incorporated: Hammock Steel Range Co., capitalized at \$300,000, by G. C. Childress, E. J. Wooten, W. M. King, T. J. Hinton and others.

Lebanon, Tenn.—Woolen Mill.—W. E. Ligon is interested in plans being formulated for the establishment of woolen mill. No details decided.

Lenoir City, Tenn.—Water-works.—Incorporated: Lenoir City Water Co., with capital stock of \$3000, by L. D. Tyson, W. P. Chamberlain, A. F. Sanford, A. J. Albers and C. E. Lucky.

Memphis, Tenn.—Cotton Compresses and Sheds.—Plant referred to last week as to be built by the Merchants' Cotton Press & Storage Co. and leased to Gulf Compress Co. will have two high density compress machines; plant is 300 feet wide and 1280 feet long, divided into four compartments by 18-inch walls, with parapets extending five feet above roof; boiler-house and coal bins are depressed below level of floor so that coal can be unloaded from bottom dump cars directly in front of fire doors; the roof to be of saw-tooth type; sheds to be 24 feet high in the center and 16 feet at eaves; plant to be equipped with automatic dry pipe sprinklers, water being supplied from city mains and from 100,000-gallon tank on tower 100 feet high. Building and machinery will cost approximately \$300,000. Plans furnished by engineering department of Gulf Compress Co. and building being constructed by constructing department of Gulf Compress Co. Capacity for uncompressed cotton standing on end, 30,000 bales; two compress machines have capacity for 4000 bales in 24 hours. The building will be equipped with electric-light plant, telephones and storage battery trucks. J. R. Fordyce is engineer in charge.

Memphis, Tenn.—Can Factory.—Memphis Can Manufacturing Co. has been incorporated with capital stock of \$100,000 to build plant for manufacturing all kinds of tin cans; buildings to occupy space 100x200 feet and cost, with equipment, about \$30,000. Automatic machinery, operated by electricity, will be installed. Incorporators: W. W. Simmons, I. F. Peters, Emil Nathan, C. W. Thompson and W. A. McClure. Last named is principal and can be addressed care of I. F. Peters, secretary of Industrial League, Memphis, or care of Houston Can Manufacturing Co., Houston, Texas.

Model, Tenn.—Iron Furnace.—Tennessee Kaolin, Iron & Timber Co. is said to have under consideration the rehabilitation of the Great Western furnace, recently purchased, which has been idle for some years.

Park, Tenn.—Water-works.—City Council has granted franchise to the Knoxville Water Co., Knoxville, Tenn.

Ripley, Tenn.—Street Improvements.—City will vote August 8 on issuing \$15,000 in bonds for traveling streets. Address The Mayor.

Rockwood, Tenn.—Hosiery Mill.—Rockwood Mills, mentioned last week, will probably

make improvements during the fall. Company has appointed a committee to report September 5 on advisability of enlarging, and to what extent.

Rockwood, Tenn.—Iron Furnace.—Roane Iron Co. is now relining and otherwise repairing one of its furnaces and will probably arrange for resuming operation next month; general offices at Chattanooga, Tenn.

Waverly, Tenn.—Sawmills.—Lucas Land & Timber Co., reported incorporated last week with \$125,000 capital stock, will produce rough and dressed lumber; will operate sawmills, drykilns, etc., and machinery is to be purchased; A. W. Lucas, president, and W. B. Hillman, secretary-treasurer.

#### TEXAS.

Austin, Texas.—Natural-gas Developments. Texas Natural Gas Co. has been incorporated in Delaware with capital stock of \$100,000 by W. B. Chapman, H. B. Kester and J. T. Furlong, all of Pittsburg, Pa.

Ballinger, Texas.—Water-works.—Stock company has been organized by Jo Wilmet, Herman Glescke, C. A. Doose, W. A. Norman and others to sink artesian wells for supplying city with water, supplementing present water system. Bids will be received until August 17 by Jo Wilmet, cashier of Citizens' National Bank and chairman of committee; usual rights reserved.

Beaumont, Texas.—Grain Elevator.—J. S. Gordon & Co. will build grain elevator and warehouse, and are said to have received plans and specifications.

Beaumont, Texas.—Lumber Mills.—Empire Timber & Lumber Co. has been incorporated with capital stock of \$60,000 to handle the product of various mills, and has contract for 250,000 feet daily; W. C. Gray, president; B. R. Moses, vice-president and general manager, and Osa Anderson, secretary; offices at 217 Keith Building.

Beaumont, Texas.—Oil Pipe Line, etc.—Reported that the Security Oil Co. has begun the construction of an additional pipe line from its Beaumont refinery to Sabine, Texas. Construction has begun on two large steel tanks to have capacity of 5000 barrels each.

Beaumont, Texas.—Turpentine Plant.—Gilligan-Vizard Company of New Orleans, La., is reported as having decided to establish turpentine plant at or near Beaumont; to begin with an installation of seven or eight stills this fall and increase the equipment as required. L. P. Landis is president at Beaumont.

Brownsville, Texas.—Irrigation Canal.—Texas Rio Grande Canal Co. has begun the construction of proposed canal to irrigate 3000 acres of sugar land, and is about to purchase considerable machinery that will be needed for pumping and power plant; E. H. Brackett, general manager, at Brownsville; New York offices at 49 Wall street.

Burkeville, Texas.—Sawmill and Timber Land.—E. C. Ford of Fort Worth, Texas, has purchased 10,000 acres of timber land near Burkeville and will build sawmill to cut the timber.

Cash, Texas.—Oil Wells.—Cash Oil Co. incorporated by E. H. H. Green of Dallas, Texas, and others to develop 10,000 acres of oil lands in Hunt county, near Cash.

Chillicothe, Texas.—Cotton Gin.—Farmers' Union Gin Co. will install four additional gins. W. T. Mathis has been elected secretary-treasurer and A. V. Haynes manager.

Dallas, Texas.—Optical Goods.—Clarence Linz Company incorporated with capital stock of \$6000 to manufacture optical goods by Clarence Linz, David L. Wertsman and Sidney Reinhardt.

Dallas, Texas.—Paving and Arch.—Park Board has appropriated \$6500 to be used in constructing 14-foot sidewalks at the Fair Grounds Park. Board has also adopted plans by J. E. Flanders for arch at main entrance, to be constructed of reinforced concrete stone with granite finish, and illuminated with electric lights, at a cost of \$8000. Ben Irelson, M. N. Baker and others are members of the Board.

Dallas, Texas.—Brick and Stone Works.—Dallas Hydraulic Brick & Stone Co. is correct title of company lately reported, and will build plant for manufacturing brick and stone by hydraulic power; W. S. Conner, T. Misenhimer and W. McDonald Conner incorporators. Machinery will be purchased and W. S. Conner can be addressed.

Falfurrias, Texas.—Electric Plant.—Falfurrias Power Co., recently reported incorporated with \$75,000 capital stock, is now building its proposed plant and will complete it soon, buildings and equipment costing \$30,000. Engine and dynamo are wanted. Address for further information James J. Allan, manager.

Galveston, Texas.—Railway Woodworking

Shops, etc.—Galveston, Houston & Henderson Railroad is proceeding with improvements previously announced and undertaking further additions to facilities. Company is planning to erect woodworking plant near present repair shop; building to be 60x100 feet, one story high, constructed of brick. Near this shop will be located the proposed 14-stall roundhouse. Piling is now being driven for foundation, and construction will begin this month. Woodworking equipment will include general woodworking machines, lathes, planers, saws, etc., all to be driven by electricity; probably separate motors will be attached to each machine. Enlargements to metal-working plant are now being considered; J. H. Hill, general manager; offices at Galveston; offices of company in New York at 54 Wall street.

High Island, Texas—Hydraulic Stone Works.—Incorporated: High Island Hydraulic Stone Works, capitalized at \$8000, by C. T. Cade, J. E. Hooper and H. M. Henshaw.

Houston, Texas—Machinery, etc.—Houston Engineering & Machine Co. has increased capital stock from \$45,000 to \$75,000.

Houston, Texas—Car-wheel Foundry.—Waterman Car-Wheel & Foundry Co. increased capital stock from \$75,000 to \$100,000.

Houston, Texas—Hoop and Handle Factory.—Houston Hoop & Handle Manufacturing Co., recently reported incorporated, will equip building at cost of \$3500 for the production of hoops and handles from elm and gum timber; capacity, 15,000 hoops and 2000 handles daily; equipment has been purchased; president, N. F. Davis; vice-president, E. H. Alexander; secretary and treasurer, J. H. Kellett.

Houston, Texas—Can Factory.—Houston Can Manufacturing Co. is planning to add new machinery to increase its facilities for manufacturing tin cans of all kinds.

Houston, Texas—Steel Plant.—Houston Structural Steel Co., H. E. Elrod, manager, is completing arrangements preparatory to erection of proposed steel works. It is understood that plant will consist of structural steel fabricating shops, templet shops, forge shops, warehouse and shipping sheds, all of steel frame, ironclad and fireproof, and equipped with electric motive power, electric traveling cranes and modern steel and iron-working machinery. Work on concrete foundations is about to begin. All material and machinery have been received. (Referred to April 11.)

Houston, Texas—Sewerage System.—Texas Grading Co. has contract to construct sewer in Fourth and Third wards. It is estimated that portion to be constructed by both city and private parties will cost about \$30,000, respectively. Approximately \$20,000 will be expended in installation of subpumping plant.

Houston, Texas—Electric Plant.—T. B. Burbridge of Denver, Col.; J. J. Henry of New York, N. Y., and associates are planning to build an electric plant to transmit power within a radius of 100 miles of Houston. They contemplate locating the plant at the lignite mines in central Texas, generating the electricity by steam power and then transmitting it for general industrial purposes. Messrs. Burbridge and Henry were recently mentioned as incorporators of the Consumers' Power & Light Co., capitalized at \$150,000, Waco, Texas.

Marshall, Texas—Street Improvements.—City has completed arrangements to invite proposals for its proposed street and sidewalk improvements. This work involves 22 miles of concrete sidewalks and street crossings. Proposals will be opened August 14. William Bradburn is City Engineer, in charge.\*

Marshall, Texas—Lumber Mills.—R. W. Taylor, Fred Esterwood and associates have purchased lumber mill, planer, etc., and will make extensive improvements.

Marshall, Texas—Sawmill.—W. M. Watterman, Timpson, Texas, will erect sawmill for the development of timber in Harrison county.

Mineral Wells, Texas—Cannery.—J. W. Tackett & Sons of Weatherford, Texas, are interested in plans for establishing cannery at Mineral Wells.

Orange, Texas—Drydock.—New Orleans Drydock Co., New Orleans, La., will build drydock at Orange, requiring about 1,250,000 feet of lumber, which will be furnished by the Litcher & Moore Lumber Co. of Orange. After being built dock will be towed to New Orleans through various canals, etc., and finally to the sea. J. Walter Thompson of the drydock company will superintend construction.

Rockdale, Texas—Coal Mines.—Rockdale Lignite Co. organized with W. C. Stillman of San Antonio, president; Dr. Jacoby of

San Antonio, secretary, and R. W. Wallis of Rockdale, superintendent. Company has purchased the Wallis Lignite coal mines near Rockdale and will develop same. Capital stock is \$20,000.

Rosenberg, Texas—Bridge.—Fort Bend county has voted \$30,000 in bonds for erection of the proposed bridge across Brazos river. Address County Commissioners.

San Antonio, Texas—Portland-cement Plant. C. Baumberger (president Alamo Cement Co.) and F. W. Cook (president San Antonio Drug Co.) are purchasers of the 300 acres of land recently noted to have been secured for establishment of Portland-cement plant; company has not been incorporated; stockholders will be practically those of present Alamo Cement Co. with others, including F. W. Cook of Evansville, Ind.

Truby, Texas—Ginney.—Dunagin Gin Co. incorporated with \$5000 capital stock by J. M. Dunagin, 811th, Texas; A. W. Hampton and N. B. Bigham, both of Truby.

#### VIRGINIA.

Berkley, Va.—Telephone System.—People's Telephone Co. will be organized with J. G. Baum president, W. Engell secretary and C. M. Williamson treasurer.

Charlottesville, Va.—Furniture Factory.—J. H. Montague & Co. incorporated with \$10,000 capital stock; O. B. Hopkins, president, and J. H. Montague, secretary-treasurer.

Emporia, Va.—Sidewalk Improvements.—W. J. Grantham of Greensboro, N. C., has received contract for proposed sidewalk improvements at Emporia; 2400 yards cement walk to be laid; materials are wanted.\*

Fredericksburg, Va.—Woolen Mill.—Melville Woolen Co. has contracted for additional new machinery, including 15 looms, cards, spooling frames, etc.

Gate City, Va.—Bottling Factory.—W. L. Starnes, W. M. Richmond and G. B. Darter will install bottling works.

Gate City, Va.—Canning Factory.—J. M. Minnich will establish canning factory.

Glen Wilton, Va.—Iron Furnace.—Princess Iron Co. has completed the dismantling of the Paduch Furnace, recently purchased at Paduch, Ky., and is considering whether to utilize the equipment in building a new furnace or increasing the capacity of present furnace at Glen Wilton; general manager's offices at Wrightsville, Pa.

Lynchburg, Va.—Coal Mines and Coke Ovens.—Freeburn Coal & Coke Co., Frank P. Harman, president, will on August 6 consider an increase in capital stock from \$300,000 to \$400,000; offices at 10th and Commerce streets.

Lynchburg, Va.—Hosiery Mill.—Incorporated: Lynchburg Hosiery Mills with capital stock of \$50,000; J. G. Burton, president; R. C. Blackford, vice-president, and C. G. Burton, secretary-treasurer.

Lynchburg, Va.—Road Construction.—Council committee on streets will open bids August 3 for construction of macadam roadway in Buchanan and 17th streets; H. L. Shaner, City Engineer.\*

Lynch Station, Va.—Mining and Manufacturing.—Rivers' Mining & Manufacturing Co. incorporated with \$300,000 capital stock; Robert Pearce, Portage, Pa., president, and Alvin Sherblin, Johnstown, Pa., secretary-treasurer.

Meadows of Dan, Va.—Telephone System.—Stuart & Laurel Fork Telephone Co. incorporated with \$5000 capital stock; J. H. Cockran, Meadows of Dan, president; S. C. Scott, Mayberry, Va., vice-president, and L. G. Cockran, Stuart, Va., secretary-treasurer.

Norfolk, Va.—Asphalt Paving.—Board of Control has awarded contract to Barber Asphalt Co. for asphalt paving on Marshall avenue; distance three blocks; contract at \$2.08 per square yard; work to be completed by September 30.

Norfolk, Va.—Lumber Mill.—H. P. Moore Lumber Co. has been incorporated; will erect and equip mill at cost of \$5000; capacity, 10,000 feet daily; president, H. P. Moore; secretary, H. D. Welby; treasurer, C. W. Cate.

Norfolk, Va.—Railway Pier.—Charles McDermott Construction Co., Washington, D. C., has contract for grading work in connection with steel pier of the Virginia Railway, now under construction at Sewell's Point; contract price, \$49,000. (Previously noted.)

Norfolk, Va.—Land Improvement.—Whitley Company incorporated with \$10,000 capital stock; L. B. Whitley, president, and G. Serpell, secretary-treasurer.

Norfolk, Va.—Land Improvement.—Prentiss Park Corporation has been chartered to develop 220 acres of land for residence and industrial sites; Goldsborough Serpell, presi-

dent; H. Tyler, secretary, and L. B. Whitley, treasurer; engineer in charge, S. F. Day; offices at 401 Atlantic Trust Building.

Norfolk, Va.—Land Improvement.—Hildebrand Realty Corporation incorporated with \$50,000 capital stock; Edmund S. Ruffin, president, and J. E. Heath, secretary-treasurer.

Petersburg, Va.—Medicines.—Peerless Medicine Co. incorporated with \$10,000 capital stock; C. F. Collier, president; W. W. Presson, vice-president, and C. H. Bridges, secretary-treasurer.

Portsmouth, Va.—Sewerage System.—City will open bids August 8 for furnishing and distributing sewer pipe on grounds of United States Naval Hospital; A. Aug Bilsoly and Wm. Jones Williams, chairman of Sewerage Committee; Bascom Sykes, City Engineer.\*

Rappahannock County, Va.—Copper Mines. Reported that Oliver E. Conner, Jr., mining engineer, Cincinnati, Ohio, representing capitalists, has discovered copper deposits on 5000 acres of land in Rappahannock county and that a company capitalized at \$1,000,000 will be organized to develop the property.

Reed Island, Va.—Iron Furnace.—Virginia Iron, Coal & Coke Co. is now proceeding with repairs to Reed Island furnace and will probably have the plant ready to blow in before September 1; company's general offices at Bristol, Va.-Tenn.; New York offices at 40 Wall street.

Richmond, Va.—Glass Works.—American Glass Works is remodeling plant recently noted purchased from Southern Glass Co. It is contemplated to erect two additional buildings. Company is interested in gas engines using producer gas; president, C. F. Sauer; vice-president, Fritz Sitterding; secretary and treasurer, Samuel B. Dunstan; address, 10-12-14 South 21st street.\*

Suffolk, Va.—Timber Development.—James C. Bell has purchased timber rights on property near Suffolk at \$3500.

Tazewell, Va.—Road Improvements.—Graham county will vote on the issuance of \$20,000 of bonds for road improvements. Address County Commissioners.

#### WEST VIRGINIA.

Barboursville, W. Va.—Lumber.—Cabell Lumber Co. incorporated with \$5000 capital stock by D. B. Shaw, W. R. Shaw, J. J. Christian and H. P. Pierson.

Barnum, W. Va.—Oil Wells.—Kight Oil Co. incorporated with \$25,000 capital stock by C. E. Kight of Barnum, H. L. Bowen, Bowden, W. Va.; C. S. Friend, Piedmont, W. Va., and others.

Charleston, W. Va.—Paving.—Board of Affairs will open bids July 30 for grading, paving and curbing Kanawha street; W. A. Hogue, City Engineer.\*

Charleston, W. Va.—Land Improvement.—Reported that Fred Paul Grosscup is organizing company to purchase and develop lands within the city limits, contemplating the erection of buildings for various purposes.

Charles Town, W. Va.—Wrapper Factory.—Incorporated: Maxwell Wrapper Co., to manufacture wrappers; capital stock \$10,000; incorporators, A. H. and C. A. Maxwell, S. J. Hockensmith, W. A. Higgs and M. C. Maxwell.

Chester, W. Va.—Oil and Gas Wells.—True Blue Oil & Gas Co. incorporated with \$25,000 capital stock by F. G. Chapman and Henry S. Showalter, both of Chester; A. D. Fansler, East Liverpool, Ohio, and others.

Crimson Springs, W. Va.—Timber Development and Iron Mining.—F. K. Welkie, W. A. Pedigo, J. H. Frantz and C. C. Nelms, Roanoke, Va., and associates, owning 2900 acres of land near Crimson Springs, are reported to develop the timber and iron ore on the property.

Davis, W. Va.—Lumber Mills.—Chartered: Meredith-Miller Lumber Co.; capital stock \$10,000; incorporators, E. N. Miller of New Kensington, Pa.; H. F. and J. J. Miller of Tarentum, Pa.; W. R. Meredith of Punxsutawney, Pa., and W. X. Meredith of Fuller, Pa.

Eckman, W. Va.—Coal Mines.—Premier Pocahontas Collieries Co., reported incorporated lately with \$300,000 capital stock, has organized with P. P. Flanagan, president and general manager; Jas. R. Gilliam, vice-president; T. D. Kauffelt, secretary, and Morris Watts, treasurer. Company will develop 4000 acres of coal land in McDowell, putting in three operations for a daily output of from 2500 to 3000 tons of coal. Electrical machinery will be installed. S. H. Meem is the engineer in charge.

Elkins, W. Va.—Water and Sewerage Systems.—City has voted the issuance of \$40,000 of bonds for extending water and sewerage

systems; referred to July 4. Address The Mayor.

Elkins, W. Va.—Water-works and Sewerage.—City has voted the issuance of \$30,000 of bonds for water-works and \$10,000 for sewerage. Bids will soon be asked; George Henry, city clerk. (Referred to July 4.)

Fairmont, W. Va.—Coal Mines.—Lowe Coal Co., recently incorporated, has organized to develop coal mines. Columbus Kelly is president, A. C. Hawkins vice-president, E. Trickett secretary and J. A. Clarke treasurer.

Fayetteville, W. Va.—Coal-land Development.—Marsh Fork Coal & Land Co., lately mentioned, purchased coal lands in Raleigh county, and states its purpose to lease the property to an operating company. C. T. Jones is president.

Glato, W. Va.—Coal Mines and Coke Ovens.—Incorporated: Shelbyanna Coal & Coke Co., authorized capital \$30,000; incorporators, C. W. J. Walker, Crumpler, W. Va.; J. M. Lusk, J. A. Godfrey, Glatto; L. M. Repass, Pinoak, W. Va., and J. C. McComas, Mataka, W. Va.

Greendale, W. Va.—Coal Mines.—Incorporated: Pittsburg Superior Coal Co., capital stock \$300,000, by August W. McDonald, Cecil Stone, Henry S. Cato, J. S. Horan and Craig Ullman.

Hinton, W. Va.—Construction.—Incorporated: Hinton Construction Co., authorized capital \$10,000; incorporators, P. M. Lawrence, Harrison Lawrence, W. Mason, J. J. Duffy, R. E. Noel, C. A. Bishop and A. J. Nottingham.

Huntington, W. Va.—Gas and Oil Wells.—Incorporated: Huntington Oil & Gas Co., authorized capital \$50,000; incorporators, I. J. Harshbarger, G. F. Miller, R. L. O'Neal and others.

Kingwood, W. Va.—Bottling Works.—Kingwood Bottling Works incorporated with \$10,000 capital stock by H. G. Flythe, A. G. Hughes, C. F. Watring and others.

Mannington, W. Va.—Printing.—Mannington Printing Co., recently reported incorporated, will engage in job printing and newspaper work; company will erect two-story brick building at cost of \$5000; manager, Jesse Poland; treasurer, H. N. Ogden.\*

Martinsburg, W. Va.—Vehicle Works.—Stewart Vehicle Co. has awarded contracts for erection of additional shop, 40x140 feet, to cost \$12,000.

McMechen, W. Va.—Sewerage Construction. City will vote again on issuance of \$25,000 of bonds for construction of sewerage system. The election held April 25 is void. (Referred to May 9.) Address The Mayor.

Moundsville, W. Va.—Vehicles.—Incorporated: Trimble & Johnson Company, to deal in and manufacture vehicles; capital stock \$40,000; incorporators, Charles Trimble of Powhatan, Ohio; S. Dorsey, J. A. Bloyd and others of Moundsville.

Pennsboro, W. Va.—Water-works.—City has voted \$12,000 in bonds for the construction of water-works. Address The Mayor.

Ronceverte, W. Va.—Furniture Factory.—Clark H. Thompson has purchased the furniture factory of Greenbrier Manufacturing Co. and will probably improve the plant.

Shinnston, W. Va.—Coal Mines and Townsite.—Reported that the Fairmont Coal Co. will develop coal mines and build town, to be known as Mudlick, erecting miners' houses, tipples, store, etc. Baltimore & Ohio Railroad Co. will build branch to the new town. It is also stated that the Fairmont Coal Co. will develop coal mines and build town near Satwell.

Spring Gap, W. Va.—Telephone System.—Little Capon & Spring Gap Telephone Co. incorporated with \$5000 capital stock by W. W. Moreland and J. E. Darr, both of Spring Gap; S. D. Dicken, Higginsville, W. Va., and others.

Sutton, W. Va.—Coal Mines.—Reported that Guy E. McCoy of Uniontown, Pa., has purchased and will develop 8000 acres of coal lands on Holly and Elk rivers.

Terra Alta, W. Va.—Timber Lands.—O. C. Crane and J. S. Lakin have sold tract of timber land at \$45,000 to Pennsylvania manufacturers, who are to develop the property.

Webster Springs, W. Va.—Land Improvement.—Incorporated: Webster Springs Land & Stock Co., with capital stock of \$20,000, by Charles C. Wentz of Parkersburg, W. Va.; F. M. Campbell, W. S. Wible, W. S. Lane, M. L. Painter and others of Greensburg, Pa.

Winona, W. Va.—Electric Plant.—Keeney's Creek Colliery Co. will build electric-power plant, and has awarded contracts for buildings and machinery; capacity to be 300 kilowatts in two units of 150 each; company will increase mining capacity to 100,000 tons annually during 1908; Clark & Krebs, Kanawha Falls, N. Y., engineers in charge for the power plant.



## INDIAN TERRITORY.

Ardmore, I. T.—Machine Shop.—Reported that the American House Brace Co. of Dallas, Texas, will establish machine shop at Ardmore for manufacturing lightning rods, house braces, etc.

Bartlesville, I. T.—Foundry and Machine Plant.—Bartlesville Foundry and Machine Works has awarded contract to Southwestern Bridge Co. of Joplin, Mo., for steel buildings for proposed plant.

Chickasha, I. T.—Electrical Supplies.—Chickasha Electrical Supply Co. incorporated with \$30,000 capital stock by H. B. Low and C. O. Blake, El Reno, O. T., and E. P. Holmes, Lincoln, Neb.

Sapulpa, I. T.—Grading Contract.—St. Louis & San Francisco Railroad has awarded contract to Cherryvale Construction Co. at about \$70,000 for yard grading in connection with construction of railway shops; J. F. Hinchley, chief engineer of railroad, St. Louis, Mo.

Sapulpa, I. T.—Oil Refinery.—Reported that W. H. Richardson & Co. will build oil refinery to have daily capacity of 1200 barrels of oil; also to manufacture various by-products.

## OKLAHOMA TERRITORY.

Elk City, O. T.—Cotton Gin.—New State Gin Co. incorporated with \$15,000 capital stock by O. L. Johnson, S. M. Flourney and John Eldredge.

Enid, O. T.—Printing Plant.—Publishers Printing Co. has been incorporated with capital stock of \$25,000 by F. I. Green, Frank Bull, Fred A. Wilson, Geo. J. Emrick and J. A. Lamar.

Guthrie, O. T.—Land and Timber Development.—William K. McGilivray Land & Timber Co. incorporated with \$500,000 capital stock by E. V. Remington and J. H. Patterson, Oklahoma City, O. T.; William K. McGilivray, John and N. O. Davis, Spokane, Wash.

Gate, O. T.—Townsite Company.—Incorporated: Gate Townsite Co., capitalized at \$10,000, by Samuel P. Kerns, Bert F. Foulds, Arthur B. Card and others.

Guthrie, O. T.—Public Improvements.—City will vote August 27 on the issuance of \$96,000 of bonds, as follows: \$40,000 for betterment of city water plant and extension of water mains; \$30,000 for construction of storm-water sewers; \$10,000 for construction of main sanitary sewers; \$10,000 for improvement of streets, including the bridging of the Cottonwood on 6th and 9th streets, and \$6000 for purchase of additional equipment for fire department; C. M. Barnes, Mayor.

Mangum, O. T.—Oil Development.—Mangum Oil & Development Co. incorporated with \$25,000 capital stock by P. A. Janaway, C. P. Hamilton, G. H. Abernathy, G. L. Wilson and others.

Oklahoma City, O. T.—Sawmills, Timber Land, etc.—Good Pine Lumber Co. (reported organized last week under Shreveport, La.) will build sawmills and establish town to develop timber lands estimated to contain 200,000,000 feet of lumber; short-leaf pine; Hiram J. Allen of Shreveport, La., president. Others interested are W. G. Wadley and J. W. Atkins of Shreveport and A. P. Waldo of Oklahoma City.

Oklahoma City, O. T.—Electric-light and Power Plant.—A. B. Hult, Chicago, Ill., has applied for franchise to construct electric-light and power plant, and, if franchise is granted, will organize the Mutual Electric Light & Power Co.

Oklahoma City, O. T.—Coal Mining, etc.—Southern Coal, Coke & Lumber Co. incorporated with \$100,000 capital stock by J. H. Patterson and E. V. Remington, Oklahoma City; J. S. Cline and W. M. Hassler, Crab Orchard, Tenn.

Weatherford, O. T.—Drugs.—Weatherford Drug Co. incorporated with \$10,000 capital stock by F. H. and Rose A. Hudelson.

Oklahoma City, O. T.—Land Development.—Southern Land & Development Co. incorporated with \$100,000 capital stock by J. H. Patterson and E. V. Remington, Oklahoma City; Alexander Holly and E. Z. Jones, Lakeland, Fla.

Oklahoma City, O. T.—Mining.—Telena Mining & Prospecting Co. incorporated with \$250,000 capital stock by E. V. Remington and J. H. Patterson, Oklahoma City; E. O. Bessee and G. M. Earle, Joplin, Mo.

Roosevelt, O. T.—Granite Quarries.—Roosevelt Black Granite Co. incorporated with \$25,000 capital stock by S. A. Stephenson, J. S. Browne, W. S. Ruggles and others.

Watonga, O. T.—Plaster Plant.—Monarch Plaster Co. incorporated with capital stock of \$300,000 by Miles E. Flaher and John H.

Lary of Watonga and Chas. H. McNider of Mason City, Iowa.

Waurika, O. T.—Electric and Gas Plants.—Waurika Public Service Corporation incorporated with capital stock of \$300,000 to operate gas and electric plants; incorporators, B. V. Cummins, Wm. F. Davis, C. L. Ford, C. B. Ellis and A. L. Walker.

## BURNED.

Alberton, Md.—Pole factory owned by F. Frederick Obrecht, 121 Light street, Baltimore, Md.; loss reported at \$3000.

Burkeville, Va.—J. L. Bradshaw Cooperage Co.'s plant, loss \$6000; Ward Lumber Co.'s plant, loss \$3000.

Clarksville, Mo.—Boone Tobacco Co.'s factory; loss reported at \$30,000.

Decatur, Ala.—Holland-Blow Stave Co.'s plant; loss \$10,000.

El Paso, Texas.—Power plant of Galveston, Harrisburg & San Antonio Railway; loss reported at \$10,000; Thornwell Fay, general manager, Houston, Texas; D. W. Fitzgerald, master mechanic, El Paso.

Epps, Miss.—J. F. Wilder's planing mill; loss reported at \$10,000.

Fort Smith, Ark.—Thrash-Lick Printing Co.'s plant; loss \$5000.

Greenville, N. C.—W. B. Higson's sawmill; loss \$5000.

Humboldt, Tenn.—Snyder & Autrey's marble plant; loss reported at \$15,000.

Lincolnton, N. C.—John & Caldwell Motz's planing mill and cotton gin; loss \$6000.

Memphis, Tenn.—Southern Cold Storage Co.'s warehouse, in course of construction; loss reported at \$230,000; plants of Oliver Finley Grocery Co., Behe Cole Grocery Co., Memphis Paper Co., Cudahy Bros. Packing Co., Green Tree Hotel Co.'s hotel.

Montgomery, Ala.—Montgomery Carriage Works, J. D. Geibel, manager, damaged by fire; loss reported at \$10,000.

Nashville, Tenn.—American Steam Feed Co.'s food plant; loss reported at \$4000.

Roanoke, Va.—Roanoke Railroad & Lumber Co.'s mills at Money Point partially destroyed; loss \$10,000 to \$15,000.

Rockingham, N. C.—G. A. Whitley & Sons' saw, planing and shingle mill; loss reported at \$4000.

Sumter, S. C.—Sumter Ice, Light & Power Co.'s ice plant; loss \$22,000.

Vernon, Texas.—Vernon Crown Creamery and Bottling Works; loss reported at \$10,000.

Zwolle, La.—Sabine Lumber Co.'s planing mill; loss \$60,000.

## BUILDING NOTES.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Alabama City, Ala.—School Building.—Dwight Manufacturing Co. has awarded contract to J. A. McDonald for erection of \$4000 addition to public-school building.

Anderson, S. C.—Church.—J. H. Casey has completed plans for erection of structure for Oakwood Baptist Church at Brogan Mills.

Anderson, S. C.—Residence.—C. Gadsden Sayre is preparing plans for residence for J. J. Trowbridge; concrete blocks.

Anderson, S. C.—Warehouse.—People's Furniture Co. has accepted plans by J. H. Casey for erecting furniture warehouse; three stories; also additions to present building; contract let for portion of work.

Anderson, S. C.—Railway Stations, etc.—Charleston & Western Carolina Railroad will include the erection of various passenger and freight stations, construction of steel viaducts and other work in connection with the decision to expend \$1,000,000 for improvements during the next 12 months; G. G. Lynch, general superintendent, Augusta, Ga.

Anniston, Ala.—Hotel.—L. H. Kaplan will erect two-story hotel with frontage of 60 feet.

Atlanta, Ga.—Building.—John E. Murphy awarded contract to W. W. Griffin for erection of building lately noted; to cost \$23,000; mill construction; 70 feet square; steam-heating plant; gas and electric lighting; no elevators; H. L. Walker, architect.

Atlanta, Ga.—Postoffice and Courthouse.—Plans and specifications are being completed for erection of proposed postoffice and courthouse, for which \$1,000,000 has been appropriated. Structure will be built either of granite or Georgia marble, with interior trimmings of marble. Bids will soon be received. James Knox Taylor, Treasury Department, Washington, D. C., supervising architect.

Atlanta, Ga.—Clubhouse.—Atlanta Athletic Club has awarded contract to Gude & Co. at about \$40,000 for erecting proposed clubhouse.

Augusta, Ga.—Store Building.—J. B. White has secured permit to erect two-story store building at a cost of \$12,000. Work will be under supervision of the Georgia Construction Co.

Austin, Texas.—Law Building.—Atlee B. Ayres, architect, San Antonio, Texas, has been authorized to improve the original design for law building now being erected by the University of Texas at Austin. About \$17,500 additional will be expended, making the total cost \$125,000.

Baltimore, Md.—Dwelling.—Elhu E. Jackson, Law Building, has awarded contract to B. F. Bennett, 123 South Howard street, for remodeling main building and erection of three-story addition 21.6x33.10 feet to dwelling at southwest corner Cathedral and Richmond streets. Electric wiring and fixtures, sanitary plumbing and other modern conveniences will be installed; cost of improvements, \$9000; Charles E. Cassell & Son, architects, Law Building.

Baltimore, Md.—Office Building and Warehouses.—Merchants & Miners' Transportation Co., Light and German streets, has awarded contract to Edward Brady & Son, 1109 Cathedral street, for the construction of office building and two warehouses on Pier No. 3, which has been leased from the city; office building to be two stories high; 75x78 feet; warehouses one story high; 72x62 and 72x74 feet; frame construction with corrugated-iron exteriors; cost \$100,000.

Baltimore, Md.—Store Building.—Referring to addition to be erected and alterations to store building at southeast corner Lexington and Howard streets by the Read Drug Co., the following contractors are estimating on the work: John Cowan, 106 West Madison street; Israel Griffith, Builders' Exchange Building; George A. Blake, Law Building; James F. Farley, Franklin Building, Baltimore and North streets, and J. J. Knight & Sons, 106 Clay street; bids to be in July 29; Louis Levi, architect, American Building.

Baltimore, Md.—Store Building.—H. P. Cohn Company, 613-615 South Broadway, has awarded contract to Joseph Schamberger, 212 East Baltimore street, for erection of additional story and general alterations to store building at northeast corner Broadway and Canton avenue; Louis Levi, architect, American Building.

Baltimore, Md.—Store Building.—R. Lertz & Son, piano dealers, 14 West Saratoga street, have awarded contract to John Hilts & Son, 3 Clay street, for the construction of store building at 7 and 9 North Charles street; four stories, 23x90 feet; brick with marble trimmings; structural iron and steel; electric wiring and fixtures; sanitary plumbing; steam-heating system; elevator; Haskell & Barnes, architects, Wilson Building, 301 North Charles street.

Baltimore, Md.—Car Barn.—Baldwin & Pennington, architects, Professional Building, 230 North Charles street, have completed plans and specifications for large reinforced concrete car barn to be erected at corner Druid Hill and Fulton avenues for the United Railways & Electric Co. Estimates on construction will be taken.

Baltimore, Md.—Store Building.—Thomas O'Neill, Charles and Lexington streets, has purchased lots at 205-209 Little Sharp street and will probably erect four or five-story store building at northeast corner Lexington and Little Sharp streets.

Baltimore, Md.—Dwellings.—Chas. B. Burdette, builder, Hoffman Building, 11 East Lexington street, will erect 18 two-story brick dwellings on Hollins street and 17 on Prince street, to cost \$35,000; George Clothier, Jr., architect, Hoffman Building.

Baltimore, Md.—Dwellings.—Charles H. Stoner, 1227 West Lombard street, will erect 12 two-story brick dwellings on Monroe and Payson streets to cost \$24,000; Jacob F. Gerwig, architect, Hoffman Building.

Baltimore, Md.—Dwellings.—Joseph H. Pentz, builder, 211 St. Paul street, will erect 25 two-story brick dwellings, with electric wiring and fixtures, sanitary plumbing and heating systems, on Guilford avenue, between 25th and 26th streets, to cost \$62,500; Jacob F. Gerwig, architect, Hoffman Building.

Baltimore, Md.—Store Building.—Miss Amelia Bauer, 525½ North Gay street, and John Lange, 427 East Lexington street, will erect two-story brick store building with modern conveniences for F. M. Kirby & Co., 223 West Lexington street, at 525½ and 527 North Gay street and extending through to 1122-1124 Little Elderry street; John Freund, Jr., architect, Vansant Building, 219 East Lexington street.

Baltimore, Md.—Dwelling.—North Avenue M. E. Church, L. A. Thirkield, pastor, 1829 North Caroline street, will erect parsonage adjoining church building on North avenue and Caroline street; three stories; 25x100 feet; granite exterior; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost \$7000. Electric wiring and fixtures and steam-heating system will also be installed in church building.

Bartlett, Texas.—School Building.—City has voted \$30,000 in bonds for the erection of school building; G. A. Lindemann, city secretary.

Bastrop, La.—Warehouse.—Farmers' Union Warehouse Co. organized to erect cotton warehouse. L. N. Polk is president, W. G. Shelton vice-president and J. B. Levy secretary-treasurer.

Beaumont, Texas.—Warehouse.—J. S. Gordon & Co. are reported to have received plans and specifications for erection of warehouse.

Bessemer, Ala.—Warehouse.—Jefferson County Farmers' Union, M. M. Gwin, committee, Mt. Pinson, Ala., is planning to build cotton warehouse at Bessemer.

Bethel Springs, Tenn.—Warehouse.—Incorporated: Bethel Springs Farmers' Union Warehouse Co., capitalized at \$3000, by W. E. Cobb, W. H. Hamilton, T. A. Mipps and others.

Birmingham, Ala.—Freight Station.—Construction has begun on the Louisville & Nashville Railroad freight station, contract for which was reported awarded some weeks ago to the Selden-Breck Construction Co. of St. Louis, Mo.; structure to be 50 feet wide by 1900 feet long; concrete foundations; brick walls; cross horizontal fire doors for the openings; canopy on each side for entire length; to be completed by October 1; cost previously reported as to be \$100,000.

Birmingham, Ala.—Building.—Tom Stobert will erect building of brick veneer; nine rooms; hot-air furnace system already determined; construction has begun; building to cost \$10,000; architects, Labelle & Krebs Co.; contractor, G. W. Papot.

Birmingham, Ala.—Church.—Calvary Baptist Church is planning to build new edifice; no details decided; James D. Ray, chairman of committee.

Bishopville, S. C.—Courthouse.—Nicholas Itrier of Atlanta, Ga., has received contract at \$56,822 for erection of courthouse; lately noted.

Braggs, I. T.—Bank Building.—Reported that John T. Blevens of Toconga, Ga., will erect bank building at Braggs.

Bronson, Fla.—Business Block.—S. G. Bean will erect brick business block, 40x80 feet; two stories; electric lighting; cost about \$7000; architect, W. B. Camp, 20 Main street, Jacksonville, Fla.; bids to be opened August 15.

Brunswick, Ga.—Residence.—J. H. W. Hawkins has prepared plans for residence recently mentioned to be erected by J. J. Lissner; contract has been let. Building will be of mill construction, 35x70 feet, to cost \$12,000; electric lighting.

Brunswick, Ga.—Residence.—P. M. Nightingale will erect residence at cost of \$15,000; building to be of gray cement brick; hot-water heating; electric lighting; architect, J. H. W. Hawkins, Jacksonville, Fla.; contractor, J. M. Richens, Jacksonville, Fla.

Camden, Ark.—Warehouse.—Camden Farmers' Union Cotton Warehouse Co. incorporated with \$4000 capital stock; J. T. McMahon, president; W. H. Fearing, vice-president, and J. G. Peace, secretary-treasurer.

Carondelet, Mo.—Church.—Carondelet Christian Church has accepted plans by J. H. Lynch, Dolph Building, St. Louis, Mo., for erection of edifice; two stories; 112x65 feet; auditorium, seating capacity 600; cost \$25,000; W. H. McClain, chairman building committee.

Cary, N. C.—Warehouse.—Bonded Warehouse Co. is being organized with L. B. Woodall secretary.

Catsville, Md.—Clubhouse.—John H. Gerwig has contract at about \$12,300 for erecting two-story frame clubhouse for Catsville Country Club; plans by George A. Nagle, 11 East Pleasant street, Baltimore, Md. Electric, sanitary-plumbing and steam-heating systems will be installed. (Referred to July 11.)

Charleston, Miss.—Warehouse.—Incorporated: Union Warehouse Co. with capital stock of \$25,000 by J. D. McCord, John Adams and B. C. Morgan of Tallahatchie, Miss.

Charlotte, N. C.—Apartment-house.—James A. Bell has had plans prepared by Leonard L. Hunter for brick apartment-house with stone trimmings, containing four apartments of six rooms each.



Chattanooga, Tenn.—Residence.—Mrs. Julia Gottschalk will build residence on Lookout mountain.

Chesapeake Beach, Md.—Residence.—Architects Frank P. Milburn & Co., Washington, D. C., are preparing plans for a summer residence for Samuel B. Milton.

Clayton, N. C.—Warehouse.—Bonded cotton warehouse company is being organized with L. F. Austin secretary.

Columbus, Ga.—Church.—First Baptist Church, J. T. Cooper, chairman of building committee, has decided to expend \$16,000 for proposed remodeling of its edifice.

Columbus, Ga.—Parsonage.—St. Paul Methodist Church awarded contract to T. K. Taylor for erection of proposed parsonage after plans and specifications by Lockwood Bros.

Concord, N. C.—Warehouse.—Cabarrus County Cotton Association will build cotton warehouse.

Corning, Ark.—Hall Building.—I. O. O. F. has awarded contract to J. W. Abbott for erection of proposed hall; two stories, 48x100 feet; ordinary construction; estimated cost, \$11,000; architect, R. P. Morrison of Hot Springs, Ark.

Cullman, Ala.—Home.—Odd Fellows adopted plans by Fred Gordon Shaw, Meridian, Miss., for erection of widows and orphans' home. Excavating and laying of foundation will be undertaken by board of trustees, under supervision of John Woodrow, Birmingham, Ala., who is in charge of entire work. Sealed bids for superstructure, marked "Proposals for Odd Fellows' Home," will be received until August 23 by L. N. Buell, secretary board of trustees, 327 Main street, Brighton, Ala., from whom plans and specifications can be obtained after August 1. Specifications will ask for bids for both brick and reinforced concrete; usual rights reserved; John Ellis, Anniston, Ala., chairman of board. (Referred to June 13.)

Dallas, Texas—Residence.—J. T. Trezevant has permit for erection of his proposed residence, to cost \$28,000; contract awarded to Peterman-Curtis Construction Co.; architects, Willis & Overbeck; mentioned June 27.

Dallas, Texas.—Warehouse.—John Deere Plow Co. has received building permit for its proposed warehouse recently announced; 100x100 feet; brick and steel construction; three stories; cost \$39,000; O. A. Akerman, architect, Moline, Ill.; J. W. Slaughter Construction Co., contractor.

Dallas, Texas.—Lodge Building.—Tannehill Masonic Lodge, E. Dick Slaughter, master, is arranging to erect lodge building on site 100x100 feet.

Danville, Va.—Y. M. C. A. Building.—Sealed proposals will be received by Frank Talbott, chairman building committee, until August 15 for erection of Y. M. C. A. building according to plans and specifications by Aubrey Chesterman, Lynchburg, Va., which can be seen at office of Frank Talbott. Bond of 25 per cent. of contract price required; usual rights reserved. (Referred to May 16.)

Davidson, N. C.—Store Building.—R. D. Mooney will erect store building; 56x70 feet; hot-air heating; electric lighting; cost \$3800; planned and built by R. D. Mooney.\*

Davidson, N. C.—School Building.—Graded-school building will be erected at cost of \$4500; architects, Wheeler & Runge, Charlotte, N. C.; contractor, B. C. Deal; building to be two stories, with auditorium, classrooms, music-room and cloakrooms; brick-veneered construction; electric lighting.

Durham, N. C.—Y. M. C. A. Building.—Y. M. C. A. is preparing to consider proposals for erection of its proposed building; plans previously accepted from Hill C. Linthicum; building to cost \$30,000.

Elizabethton, Tenn.—School Building.—City will vote on the issuance of \$25,000 of bonds, \$20,000 to be used in erection of school building and \$5000 for general improvements, including construction of granolithic sidewalks. Address The Mayor.

El Paso, Texas.—Store Building.—P. R. Ward has contract to erect store building for S. H. Kress Company after plans by Julius Zeitner, New York city. Structure will be 53x90 feet; two stories; 10-foot basement; cost \$27,000.

Easley, S. C.—Church.—J. H. Casey of Anderson, S. C., has prepared plans for erection of edifice for Union Church at Glenwood Mills, Easley, S. C.

Fort Worth, Texas.—Workhouse.—Board of Commissioners awarded contract to Southern Structural Steel Co. of San Antonio, Texas, at \$8200 for erection of workhouse.

Fort Worth, Texas.—Railway Depot, etc.—It is announced that the St. Louis Southwestern Railway will not arrange for its proposed improvements until after the stockholders and directors' meeting next Octo-

ber. These improvements include the erection of freight depot, construction of team trackage and providing other terminal facilities; about \$250,000 to be expended; F. H. Briton, general manager, St. Louis, Mo.; M. L. Lynch, chief engineer, Tyler, Texas.

Frankfort, Ky.—Church.—Baptist Congregation, Rev. W. T. Silvey, pastor, has had plans prepared by Leo L. Oberwarth, I. O. O. F. Building, for erection of edifice; two stories, 50x100 feet; press brick and Bedford stone; mosaic tiling; cost \$20,000.

Frederick, Md.—Railway Depot.—Northern Central Railway, G. Latrobe, assistant engineer, Baltimore, Md., contemplates building a passenger or freight station at Frederick.

Gainesville, Ga.—Business Building.—Pierce & Francisco will erect business building 24x64 feet.

Gaffney, S. C.—School Buildings.—Wheeler, Runge & Dickey of Charlotte, N. C., have completed plans for erection of two proposed school buildings, and bids for construction are being received at Gaffney. Bids for steam and hot-air heating also being considered.\*

Garner, N. C.—Warehouse.—Bonded Warehouse Co. is being organized with George Mitchner secretary.

Goldboro, N. C.—School.—Board of School Trustees will expend about \$26,000 for erection of school building lately noted; two stories and basement; 68x110 feet; brick construction; hot-air heating; electric lighting; architects, Barrett & Thomson of Raleigh, N. C.; date of opening proposals not determined.

Greensboro, N. C.—Hotel.—Stonewall Hotel Co. has accepted plans and specifications by Frank P. Milburn & Co., Washington, D. C., for proposed hotel to cost \$60,000. Address Stonewall Hotel Co., care J. P. Sanders.

Greenville, S. C.—College.—Bruce & Everett, Atlanta, Ga., have been employed to prepare plans for art and auditorium building and other improvements for Greenville Female College.

Harrisonburg, Va.—Residence.—W. S. Southall, Elkton, Va., will erect residence in Harrisonburg; 10 rooms; brick; also stable and carriage-house; electric and gas lighting; architect not chosen.

Hattiesburg, Miss.—Elks' Home.—Hattiesburg Elks' Home Association incorporated with capital stock of \$50,000 to build proposed home and office building. Address care C. W. Rich.

Hickman, Ky.—Warehouse.—American Society of Equity, John A. McClure, secretary, will build warehouse; ordinary construction; elevator; cost \$10,000 to \$15,000; details not determined.\*

Hot Springs, Ark.—Children's Home.—Children's Home and Girls' Protective Association, Rev. R. P. Lucado, president, will erect building to cost \$40,000.

Houston, Texas.—Freight Terminals.—Houston Belt & Terminal Co. has decided to issue notes for \$147,000 in order to begin its proposed extensive improvements for providing freight terminals, as announced previously. At first the sites will be cleared, and this will be followed by the acceptance of plans and specifications for erecting freight stations, and later passenger stations. W. E. Green is president.

Imboden, Ark.—Warehouse.—Lawrence County Farmers' Union Warehouse Co., J. W. Hindman, president, has awarded contract to Lester Williams, Little Rock, Ark., for erection of cotton warehouse to cost \$10,000.

Iva, S. C.—School.—School Trustees have appointed J. H. Casey of Anderson, S. C., architect for proposed school to be erected at cost of \$6000. (Recent report naming another architect was erroneous.)

Jackson, Ky.—Hotel.—C. J. Little will build hotel to cost \$25,000, and has awarded contract to James Donahue for the stone-work; plans prepared by J. W. Crone of Winchester, Ky.

Jacksonville, Fla.—Business Block.—John C. Raabe will erect business block; brick; three stories; electric lighting; cost about \$15,000; architect, W. B. Camp, 20 Main street; bids to be opened August 10.

Jacksonville, Fla.—Residence.—W. B. Myers will open bids August 1 for erection of his proposed residence; two stories; 45x60 feet; cost \$8000; architect, W. B. Camp, 20 Main street.

Johnson City, Tenn.—Church.—Market Street M. E. Church has plans for proposed edifice and is inviting bids for construction. Address C. L. Marshall, chairman of building committee.

Kansas City, Mo.—Warehouse.—Minneapolis Threshing Machine Co. has purchased site at \$33,000 for erection of warehouse.

Kansas City, Mo.—Residence.—James P.

Allen of Muskogee, I. T., will build residence to cost \$20,000 in Kansas City.

Kansas City, Mo.—Warehouse.—Peet Bros. Manufacturing Co. has let contract for erection of warehouse 100 feet square, four stories high; cost of structure, \$100,000.

Kempsville (P. O. Norfolk), Va.—Church.—Baptist Congregation has awarded contract to S. B. Hutchins, Norfolk, Va., for erection of edifice to cost between \$6000 and \$7000.

Knoxville, Tenn.—Office Building.—International Harvester Co. will erect office building and warehouse; brick; four stories, 90x130 feet; slow-burning construction; two elevators; two vaults; plans by Barber & Klutz.

Knoxville, Tenn.—University Building.—Thomas & Turner, recently awarded contract for erecting agricultural building at University of Texas, are preparing to begin construction; 160x100 feet; pressed brick and Bedford stone; two basements and three floors above; interior finished in dark oak; auditorium to seat 500 to 700; steam-heating equipment, etc.

Knoxville, Tenn.—Agricultural Building.—Plans prepared by C. E. Ferris, professor of engineering, adopted for Morrill Hall at University of Tennessee and contract awarded to Thomas & Turner at \$35,185. Structure will be 160x100 feet; four stories and basement; Knoxville pressed brick; Bedford (Ind.) gray stone trimmings. According to terms of \$10,000 appropriation made by the Legislature, building will be devoted to sciences bearing on agriculture. Committee, Dr. Brown Ayres and others, also adopted preliminary plans for improvements to South College and East and West colleges, including installation of steam-heating apparatus, replacing of brick partitions by steel beams, etc. (Referred to June 20.)

Knoxville, Tenn.—Bank Building.—Mechanics' Bank & Trust Co., Bird M. Robinson, New York, N. Y., president, will erect fireproof bank building.

Knoxville, Tenn.—Business Building.—Mrs. George W. Baxter is having plans prepared for erection of business building; four stories; brick; cost \$30,000.

Knoxville, Tenn.—Building.—Lynn A. Hayes will erect one-and-one-half-story building with basement at cost of \$6000; plans have been prepared by Pittman-Hayes Company, 409 Prudential Building; gas and electric lighting; bids to be opened August 10.

Lafayette, Ala.—School Building.—Lafayette College will erect \$10,000 addition to school building under direction of City Council. Construction has begun.

Lake City, Fla.—Residence.—G. M. Anderson will build residence 42x50½ feet; two stories; mill construction; electric lighting; cost \$4000; bids to be opened August 10; architect, W. B. Camp, 20 Main street, Jacksonville, Fla.

Laurens, S. C.—Building.—Enterprise Bank has awarded contract to E. L. Hertzog, Spartanburg, S. C., for erection of bank building, store and Masonic hall; probably of concrete brick; cost \$20,000.

Leadwood, Mo.—School Building.—School district will vote on issuing \$25,000 in bonds for erection of school building. Address The Mayor.

Lillington, N. C.—Warehouse.—Bonded Warehouse Co. is being organized with H. T. Spears secretary.

Little Rock, Ark.—Newspaper Office Building.—Contract awarded to Stanton & Collamore at \$116,000 for erection of proposed office building for the Little Rock Gazette; recently noted; columns and girders of reinforced concrete; three stories, 140x140 feet; first story fronts of Latesville marble, and two stories above of white terra-cotta; first floor interior of marble; birch woodwork; roof of concrete covered with composition; architect, Geo. R. Mann.

Louisville, Miss.—Warehouse.—Incorporated Winston County Union Warehouse Co., capitalized at \$10,000, by M. A. Coleman, George Carroll, J. J. Woodward and others.

Louisville, Ky.—Warehouse.—Glencoe Distillery Co. awarded contract to J. W. Connor, 26th and Maple streets, for erection of warehouse lately noted; eight stories high; 90x121 feet; mill construction, bonded warehouse style; fan system of heating; steam-power elevators; estimated cost \$42,000; architect, Fred Ehrhart, 409 Norton Building.

Louisville, Ky.—Warehouse.—The Fireproof Storage Co.'s building, reported last week, will be eight stories high; 42x150 feet; reinforced construction; hot-water heating; electric lighting; two electric elevators; architects, Clarke & Loomis; completed building to cost \$75,000.

Macon, Ga.—Residence.—W. O. Donovan has had plans prepared by Curran Ellis, Ellis Building, for erection of brick colonial residence in Vineville.

Macon, Ga.—Library.—Mercer University has adopted plans by Lockwood Bros., Columbus, Ga., for erection of proposed library building; probably gray stone or marble finish; storerooms, three stories high, accommodating about 100,000 volumes; cost \$40,000; Mr. Jameson, president.

Malvern, Ark.—Warehouse.—Hot Springs Farmers' Union Warehouse Co. incorporated with \$5000 capital stock; Austin Graus, president; C. F. Berry, vice-president, and D. S. Bray, secretary-treasurer.

Mantee, Miss.—Bank Building.—Bank of Mantee will erect at cost of about \$3500 bank building recently mentioned; 22x50 feet; brick; plate-glass front; fireproof vault; architect and contractor not yet selected; president, A. M. Harley.

Marietta, Ga.—Residence.—Reported that Perry McCravy, Atlanta, Ga., will erect residence at Marietta.

Marksville, La.—School Buildings.—Board of Bond Trustees has disposed of bond issue of \$17,500, the proceeds to be used in erection of 10 school buildings in Avoyelles parish, with additions to Bunkie and Evergreen buildings. V. L. Roy, superintendent, states in his report that four school taxes have been voted since May 15 to erect school buildings, etc., and that two elections have been ordered to be held August 8. Address Avoyelles County School Board.

Memphis, Tenn.—Apartment-house.—Horn Bros. awarded contract for erection of apartment-house; two stories; 40x100 feet; brick with stone-veneered front; contain six flats.

Memphis, Tenn.—Apartment-house.—Nathan Devorkin has had plans prepared by F. H. Ely for erection of apartment-house; two stories; 44x81 feet; brick; composition roof; concrete foundation; contain five flats of four rooms each; cost \$12,000; bids are being received.

Memphis, Tenn.—Church.—Centenary Methodist Church has secured permit to erect edifice; stone; metal roof; cost \$8000. Plans have been prepared by F. H. Bely; Rev. H. W. Key, pastor.

Memphis, Tenn.—School Buildings.—Board of Education is giving consideration to arranging for erection of school buildings previously announced. Plans by Alsop & Woods were accepted recently. The structures planned include two buildings to cost \$30,000 each and one to cost \$20,000; E. A. Neely, president of Board of Education.

Midway, Tenn.—Warehouse.—S. J. Greenbaum has awarded contract to James C. Hawkins, Winchester, Tenn., for erection of seven-story brick warehouse.

Mobile, Ala.—Depot.—Louisville & Nashville Railroad Co., W. H. Courtenay, chief engineer, Louisville, Ky., states erection of depot at Mobile is not at present contemplated; recently mentioned.

Montrose, Ala.—Hotel.—Reported that Murray & Peppers of the Bay Steamship Co., Mobile, Ala., are planning the erection of hotel at Montrose.

Mt. Airy, Ga.—Hotel.—C. Gresham will build hotel lately mentioned; of brick; 48x220 feet; electric lighting; semi-fireproof; engines and motors; cost \$10,000; architects, Hunter & Vaughan, Charlotte, N. C.\*

Mt. Airy, Ga.—Hotel.—C. Gresham will build hotel lately mentioned; of brick; 48x220 feet; electric lighting; semi-fireproof; 50-horse-power engine; 50-kilowatt dynamo; cost \$100,000; no bids wanted as yet; architects, Hunter & Vaughan, Charlotte, N. C.\*

Nashville, Tenn.—Warehouse.—Joseph Lightman will build warehouse for general storage purposes.

Nashville, Tenn.—Residence.—Construction is proceeding on residence, previously reported, for Bishop Thomas S. Byrne; foundation work by Foster & Creighton; plans by Thompson, Asmus & Norton; 50x69 feet; gray brick; stone trimmings; tiled roof; plate glass for windows, doors and transoms; three stories high; hardwood floors; woodwork finished in white, etc.

Nashville, Tenn.—Cathedral.—Excavation and foundation construction has begun by Contractors Foster & Creighton for proposed Roman Catholic cathedral previously reported; contracts for superstructure have not been awarded. Architects Thompson, Asmus & Norton are in charge; cathedral to be of Roman architecture; gray brick trimmed with stone; tiled roof and tower; 90x160 feet, etc.

New Boston, Texas.—Warehouse.—Farmers' Union of Bowie County awarded contract to J. A. Goodman of Clarksville, Texas, for brick work and to J. T. Hicks of Texarkana, Texas, for wood work for erection of cotton warehouse to cost \$4500.

New Martinsville, W. Va.—Office Building.—Wetzel Democrat Publishing Co. awarded contract to Levi M. Barger (not Morgan)



for erection of building lately noted; two stories; 30x80 feet; gas-heating plant; gas and electric-lighting fixtures; cost \$6000; architects, Alexander & Chaplin.

New Orleans, La.—Store Building.—May & Ellis Co. has ordered plans and specifications from Toledano & Wogan for store building; 52x104 feet; walls of cement; galvanized-iron cornices; rear walls of brick; galvanized-iron window frames and sash; wire-glass windows; plate-glass windows for store fronts; upper floors floored with schillinger; ornamental steel ceiling, resting on iron columns and steel girders, etc.

Newport, Tenn.—Bank Building.—Merchants & Planters' Bank has closed bids for erecting bank building lately noted; 35x110 feet; bank and general office structure; steam-heating plant; electric-lighting fixtures; cost when completed, \$20,000; architects, Baumann Bros., Knoxville, Tenn.; contractors, Borches, Wardrop & Co., Knoxville, Tenn.

New Orleans, La.—Greenhouse.—Charles Dittman, chairman committee, will open bids August 6 for erection of glass range and greenhouse. Specifications and information can be had by applying to Julius Koch, architect, 501 Denegre Building, 219 Carondelet street.

New Orleans, La.—School Buildings.—Contracts have been awarded to United Construction Co. for erection of four school buildings as follows: Walter C. Flower school, \$23,550; others at \$24,000, \$23,750 and \$24,000.

Norfolk, Va.—Building Improvements.—Board of Control has awarded contract to Myers-Turpin Construction Co. at \$4300 for building improvements.

Norfolk, Va.—Dwellings.—O. L. Williams has awarded contract to S. B. Hutchins for erection of two dwellings; frame; two full stories and a story under mansard roof; cost about \$6000.

Okmulgee, I. T.—Hotel.—Reported that contract has been awarded to Muskogee Construction Co. for erection of hotel.

Oklahoma City, O. T.—Apartment-house.—J. H. Palmer will erect apartment-house; two stories; brick; 42x56 feet; cost \$10,000.

Oklahoma City, O. T.—Lodge Building.—Odd Fellows Building Association, James Lowrie, Z. E. Beemblossom and others, directors, considering plans for erection of building to cost \$40,000.

Paris, Mo.—Courthouse.—Monroe county will vote on the issuance of \$75,000 of bonds for erecting courthouse. Address County Commissioners.

Park, Tenn.—School.—City will erect auditorium addition to school building at cost of \$15,000; size 62½x100 feet; ordinary construction; steam heat; electric lighting; architects, Barber & Klutz, Knoxville, Tenn. Bids will be opened about August 10; Mayor, W. R. Johnson.

Pensacola, Fla.—Bank Building.—Bids will be opened October 1 for construction of bank building recently noted for American National Bank; to be 60x90 feet; 10 stories; brick and terra-cotta; terra-cotta cornice; fireproof construction; gravity system; cost \$225,000. (Other details July 25.)

Pickens, S. C.—Courthouse.—E. F. Loopier is now receiving bids for erection of proposed courthouse additions after plans by J. H. Casey of Anderson, S. C.; \$8000 to be expended.

Pine Beach, Va.—Hotel.—Princess Anne Investment Co. considering erection of fireproof hotel to cost \$100,000; C. A. Neff, president, Norfolk, Va.

Portsmouth, Va.—Business Building.—Mr. Kirm, proprietor of the Kirm Building, will rebuild structure recently burned.

Portsmouth, Va.—Tenement Building.—O. L. Williams will erect double tenement building at cost of \$5500; mill construction; gas and electric lighting; architect, B. Colona; contractor, B. N. Hutchins.

Prescott, Ark.—Warehouse.—Farmers' Union Warehouse Co. incorporated with \$25,000 capital stock; William C. Jones, president; W. E. Marsh, vice-president, and W. C. Flitts, secretary-treasurer.

Quanah, Texas.—School Building.—Quanah School Board has accepted plans by Walter E. Taylor of Fort Worth, Texas, for erection of proposed school building; three stories; 65x70 feet; pressed brick construction; auditorium to seat 800; cost \$15,000; to open proposals August 15; mentioned May 16.

Radford, Va.—School Building.—City is preparing to arrange details for erection of school building, for which \$11,000 has been voted. Address The Mayor.

Raleigh, N. C.—Railway Station.—Seaboard Air Line, Southern Railway and Raleigh & Southport Railway will remodel union station after plans and specifications prepared

by Frank P. Milburn & Co., Washington, D. C.

Reidsville, N. C.—School.—New Bethel Academy incorporated with \$50,000 capital stock by G. W. Long, Jas. V. Price and others to rebuild Sharp Institute, burned several months ago.

Riesel, Texas.—Warehouse.—Riesel Cotton Warehouse Co., reported incorporated lately with \$5000 capital, will build cotton warehouse; 48x128 feet; fireproof construction; contractor, Houston Cotton Warehouse Co., Houston, Texas.

Roanoke, Va.—Church.—First Presbyterian Church has awarded contract to C. D. Keffler for erection of proposed \$20,000 addition recently announced.

Rock Hill, S. C.—Club Building.—Carhartt Cotton Mills will build clubhouse for cotton-mill operatives; three stories high; of brick; two swimming pools; culinary department; auditorium with stage, etc.; plans being prepared by architects of Detroit, Mich. Hamilton Carhartt of Detroit is president of mills.

Rosenberg, Texas.—Warehouse.—Farmers' Union has awarded contract to J. W. Goar for erection of proposed cotton warehouse; steel construction; fireproof; 80x120 feet.

Rosenberg, Texas.—Courthouse.—Fort Bend county has voted \$75,000 of bonds for erection of the proposed courthouse. Address County Commissioners.

Salisbury, N. C.—Church.—Frank P. Milburn & Co., Washington, D. C., will prepare plans and specifications for proposed remodeling of St. Luke's Church.

Salisbury, Md.—Hospital Addition.—T. H. Mitchell has received contract for erection of proposed nurses' home addition to Peninsula Hospital. Plans by Owens & Sisco, 1605 Continental Trust Building, Baltimore, Md.

Savannah, Ga.—Office Building.—Georgia State Building and Loan Association awarded contract to McKenzie-De Leon Construction Co. at about \$40,000 for remodeling office building.

San Antonio, Texas.—Store Building.—C. H. Nanwald has had plans prepared by Leo M. J. Diemann, 306 East Commerce street, for erection of store building; two stories; 35x77 feet; brick; stone trimmings; cost \$8000.

San Antonio, Texas.—School Buildings.—City School Board has awarded following contracts: W. E. Tietze at \$19,100 for erection of schools No. 2 and 18, Rock Quarry and Beacon Hill; G. W. Thomas at \$21,365 for erection of schools No. 13, 15, 16 and 17; J. Skirving at \$4900 for erection of Douglas school; George Findley & Son at \$10,588 for erection of Cuney school and \$350 for heating apparatus, and Texas Seating Co. at \$8443.96 for supplying 2900 seats. Harvey L. Page will prepare plans for the Missionfield school.

San Antonio, Texas.—Bank.—Henry T. Phelps is architect for Woods National Bank building, recently noted to be erected at cost of \$150,000; to be 26x100 feet; 10 stories; steel; fireproof; electric lighting; date for opening bids not set.

San Antonio, Texas.—Bank Building.—Reported the State Bank & Trust Co. has definitely decided to erect proposed five-story bank and office building; to be of steel frame, 46x110 feet; W. T. McCampbell, president.

San Antonio, Texas.—Business Building.—J. Sternenberg of San Antonio, L. J. Nichols of Winfield, Kan., and others will erect four or five-story business building; site purchased at \$70,000.

San Antonio, Texas.—Passenger Station.—International & Great Northern Railway has awarded contract to Stewart Construction Co. of St. Louis, Mo., at about \$200,000 for erection of passenger station previously reported; 110 feet square; two stories and rotunda surmounted by dome 88 feet high, supported on eight Tuscan cement columns, each four feet diameter; concrete, rough-cast pebble, stained dark color on exterior; mission oak for woodwork; wrought-iron hardware; ornamental wrought iron; concourse connected to train sheds; construction to begin at once; Leroy Trice, general manager, Palestine, Texas.

Savannah, Ga.—Dwelling.—Charles G. Edwards will build dwelling.

Savannah, Ga.—Residence.—W. R. Beach of Waycross, Ga., reported to build residence in Savannah.

Shawnee, O. T.—Warehouse.—Farmers' Union is reported to build warehouse; 300x500 feet; concrete floors; cost \$25,000.

Silsbee, Texas.—Hotel.—Gulf, Colorado & Santa Fe Railway is arranging to rebuild Silsbee Hotel, burned several months ago; structure probably to be of reinforced concrete; 40 rooms; to cost \$75,000; J. H. Keefe, general manager, Galveston, Texas.

Spencer, N. C.—Building.—Spencer Building Co. incorporated with capital stock of \$125,000, and E. H. Stewart, president; N. G. Willis, secretary-treasurer, both of Winston-Salem, N. C.

Starr, S. C.—Residence.—Mrs. Bessie Allen will build residence; two stories; colonial style; private water-works, sewerage and electric-lighting equipment; plans being prepared by C. Gadsden Sayre of Anderson, S. C.

St. Augustine, Fla.—Theater and Business Building.—Realty & Theater Co. has awarded contract to M. T. Lewman & Co., Louisville, Ky., for erection of proposed combined theater and office building; four stories; 85x155 feet; fireproof; gray brick; red trimmings; gas and electric lights; steam heat; electric elevator; arcade, 15x55 feet; theater, in rear, with seating capacity of 1000; total cost \$100,000; plans prepared by Fred A. Henderichs, who will also be constructing architect. (Referred to May 30.)

St. George, S. C.—School.—C. Gadsden Sayre of Anderson, S. C., is preparing plans for erection of school building to cost \$15,000 at St. George.

St. Joseph, Mo.—Hotel.—Contract has not been let for construction of hotel recently mentioned to be erected by Buchanan Hotel Building Co.; plans have been prepared by Eames & Young, St. Louis, Mo., and E. J. Eckel of St. Joseph; building to be nine stories; brick and stone; fireproof, steel construction; steam heat; electric and gas lighting; two passenger and one freight electric elevators; refrigerating plant; cost of hotel about \$400,000. Selden-Breck Construction Co., St. Louis, Mo., will probably receive contract. Islet Bros., Cordova Hotel, Memphis, Tenn., will be lessees.

St. Louis, Mo.—Office Building.—Contract has been let to Jas. Stewart Construction Co. for office building recently mentioned to be erected by Lillburn Realty Co. after plans by Mauran, Russell & Garden; 16-story building; absolutely fireproof; cost \$2,000,000. (Other particulars noted July 25.)

St. Louis, Mo.—Apartment-house.—H. P. Tausig, 523 Victoria Building, will erect apartment building lately noted; seven stories and basement; 90x109 feet; fireproof; reinforced-concrete construction; low-pressure steam heating; cluster lights for electricity; electric freight elevator and electric passenger elevator; install machinery for heating plant; also equipment for elevators and lighting; cost \$100,000; contractors, Sanguinet & Tausig.\*

St. Louis, Mo.—Apartment-house.—Shisler-Bidwell Building Co., 3624 Shaw avenue, will act as its own contractor for erection of proposed apartment-house; four stories; 107x180 feet; slow-combustion construction; low-pressure steam-heating plant; electric-lighting fixtures; electric elevators; compressed-air cleaning apparatus; architect, Chas. H. Dellerling; cost \$175,000. Building company will accept suggestions for perfecting equipment.\*

St. Louis, Mo.—Engine-house.—City's proposed fire-engine house to be 30x82 feet; wood construction; steam-heating plant; electric lighting; fire-alarm apparatus; cost \$20,000; architect, Jas. A. Smith, City Hall.

St. Louis, Mo.—Engine-house.—City's proposed engine-house No. 46 will be one-half fireproof; 35x87 feet; steam-heating plant; electric lighting; fire-alarm apparatus; cost \$30,000; bids opened July 26; architect, Jas. A. Smith, City Hall.

Tallahassee, Fla.—Business Blocks.—George W. Saxon will erect brick business block; one building 44 1/2x90 feet, two stories high; one 44½x90 feet, three stories high; to cost about \$15,000; electric-lighting fixtures; hand-power freight elevator; architect, W. B. Camp, 30 Main street, Jacksonville; bids to be opened August 1 and 15.

Tampa, Fla.—Business Building.—C. M. Black of Atlanta, Ga., and Mrs. E. Black of Clearwater, Fla., will erect in Tampa business building 70x80 feet, two stories; cost \$12,000.

Tampa, Fla.—Bank and Business Building.—Bank of West Tampa will erect bank and business building; 25x55 feet; outer walls of pressed brick and granite; terra-cotta trimmings; cost \$10,000; plans prepared by Frank J. James and contract awarded to J. A. Bates.

Taylorville, N. C.—Warehouse.—Taylorville Cotton Mills, W. B. Matheson, president, will build cotton warehouse 50x100 feet.

Texarkana, Ark.—Church.—First Baptist Church will remodel edifice, expending about \$20,000; Dr. W. M. Harris, pastor.

Toulminville (P. O. Mobile), Ala.—Church.—Methodist congregation has had plans prepared for erection of edifice; Rev. J. Brace Airy, pastor.

Victoria, Texas.—Club Building.—Iroquois

Club Building Co. organized with W. N. Fleming president and C. S. Holland secretary to erect club buildings; plans to be prepared at once.

Waldron, Ark.—Warehouse.—Reported that Farmers' Union has awarded contract to Mr. McStaner for erection of sheet-iron warehouse 50x200 feet.

Walter, O. T.—School Building.—Sealed bids will be received by Board of Education until August 15 for erection of 10-room school building according to plans and specifications on file in office of Charles G. Mudd, clerk of board. Certified check and bond, as stated in specifications, will be required; C. T. Loucks, president.

Warrenton, N. C.—Warehouse.—M. P. Burwell & Co. will build warehouse mentioned last week; 50x100 feet; brick; mill construction; cost \$4000; contractors, M. P. Burwell & Co.

Washington, D. C.—Dwelling.—Harry Wardman, builder, 1333 G street N. W., will erect dwelling for himself on Columbia road near Biltmore street; three stories; brick with limestone trimmings; electric wiring and fixtures; sanitary plumbing; heating system; cost \$30,000; A. H. Beers, architect, 1333 G street N. W.

Washington, D. C.—Office Building.—The Capital City Fire Insurance Co. is being organized by Ricketts & Eynon, 1335 F street N. W., and they will erect office building to cost about \$100,000.

Washington, D. C.—Dwellings.—A. R. Townshend, The New Berne, 12th street and Massachusetts avenue N. W., will erect 12 three-story brick and stone dwellings with modern conveniences on Garfield street between Woodley lane and Cathedral avenue to cost \$60,000; Hunter & Bell, architects, 1010 F street N. W.

Washington, D. C.—Apartment-house.—John L. Warren, Columbian Building, 416 5th street N. W., has awarded contract to J. J. Kilby, 502 12th street N. E., for the construction of apartment-house at 1826 M street N. W.; four stories; 38x72 feet; brick with stone trimmings; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost \$25,000; Hunter & Bell, architects, 1010 F street N. W.

Washington, D. C.—Y. M. C. A. Building.—Young Men's Christian Association has awarded contract to Samuel N. Prescott Company, 700 13th street N. W., for general alterations to junior-department building at 17th and G streets to cost \$10,000; Harding & Upman, architects, 729 15th street N. W.

Webster Groves, Mo.—School Buildings.—City of Webster Groves and city of Old Orchard have voted \$60,000 bonds for school buildings, \$45,000 to build structure in Old Orchard and \$15,000 to improve Webster Groves school buildings. Address The Mayor.

Westminster, R. C.—Warehouse.—Sealed bids will be received by C. H. Miller at Westminster until July 31 for construction of standard warehouse for Westminster Farmers' Warehouse Co. Plans and specifications can be seen at office of DeCamp & Cunningham, engineers, Anderson, S. C., or with C. H. Miller, secretary, Westminster.

Whitesburg, Ga.—Bank.—Whitesburg Bank Co. will erect one-story brick bank building; 18x50 feet; ordinary construction.

Wilmington, N. C.—Market and Engine House.—Contract has been let to Joe Schad for construction of combined market and engine house recently noted to be erected; plans by H. E. Bonitz. Building will be 50x70 feet; slate roof; stained-glass windows; ordinary construction; hot-air heating; electric lighting; cost \$12,000.\*

Wilson Mills, N. C.—Warehouse.—Bonded warehouse company is being organized with L. F. Uzzle as secretary.

Winfield, La.—School Building.—Winfield High School has accepted plans for erection of building to cost \$75,000 accommodating 1000 persons; bonds have been voted.

Winston-Salem, N. C.—Jail.—Forsyth county is considering erection of jail building at a cost of \$30,000, plans for which will be prepared by Frank P. Milburn & Co., Washington, D. C. M. D. Bailey, Dr. John Bynum and Dr. H. A. Pfohl compose committee from Board of Health.

Woodstock, Va.—Academy Building.—Massanutten Academy awards contract this week for its proposed new building for chapel and dormitory; three stories; brick with slate roof; native stone trimmings; 40x90 feet; cost \$20,000; architects, Holmboe & Lafferty of Clarksburg, W. Va.

#### Mr. H. P. Gladfelter.

The York Manufacturing Co. of York, Pa., announces with profound sorrow the death of its honored president, Mr. H. Gladfelter, on July 11 at Spring Forge, Pa.

## RAILROAD CONSTRUCTION.

## Railways.

Alken, S. C.—A movement is reported under way to build an electric railway from Alken to Augusta, Ga., by a route little more than 17 miles long. It is intimated that the Carolina Light & Power Co. at Anderson Shoals, about half way between the two cities, may furnish current. The Mayor of Alken may be able to give information.

Arapaho, O. T.—Reported that an electric-railway franchise has been granted in Arapaho and also in Clinton to Charles Goodwin, M. L. Holcombe and H. Smith. It is proposed to build a line connecting the two towns.

Augusta, Ga.—The Charleston & Western Carolina Railway will, it is reported, spend \$1,000,000 for improvements, including new rails and extension of depot facilities. A. H. Porter is engineer of roadway at Augusta, Ga.

Bagnell, Mo.—An official letter to the Manufacturers' Record says that the Missouri Pacific Railway does not contemplate building the extension from Bagnell to Springfield, Mo., at present.

Baton Rouge, La.—C. H. Fisk, chief engineer of the Baton Rouge, Hammond & Eastern Railway, is reported as saying that 15 miles have been graded. Scott & Ogden are the contractors.

Beaumont, Texas.—Officials of the Missouri, Oklahoma & Gulf Railway are reported as saying that the line will be continued from Denison, Texas, to Beaumont and Port Arthur. H. S. Moore is chief engineer at Muskogee, I. T.

Brookhaven, Miss.—Reported that Michael O'Brien of Baton Rouge, La., has been given a contract for tracklaying on the Mississippi Central Railroad extension from Brookhaven to Natchez, Miss.

Camilla, Ga.—C. Horace McCall of Atlanta, Col. Benton Odum of Newton, Ga., and others have, it is reported, applied for a charter to build a railroad from Camilla to Newton, Ga., about 10 miles.

Cardwell, Mo.—The Paragould & Memphis Railroad Co., which has located a line from Cardwell to Paragould, Ark., 17 miles, will, it is reported, also build from Cardwell to Poplar Bluff, Mo., 50 miles; from Manila, Ark., southwest to Marked Tree, 30 miles, and from Manila southeast to Osceola, Ark., 16 miles. F. Quinn is general manager at Cardwell, Mo., and Walter B. Winn is engineer at Danville, Ill.

Carrollton, Ky.—An official letter to the Manufacturers' Record confirms the report that the Carrollton & Worthville Railroad Co. contemplates building an extension to Owenton, Ky. James Gayle is general manager at Carrollton.

Dallas, Texas.—Directors of the proposed Dallas Interurban Electric Railway Co., which proposes to build a line from Dallas to Greenville, Texas, about 50 miles, are reported as saying that plans are going along nicely and it is hoped to begin work soon. D. E. Waggoner of Dallas is president, and the American Engineering Co. of Indianapolis, Ind., Charles N. Wilson, president, is expected to build the road.

Elkin, N. C.—H. G. Chatham of the Elkin & Alleghany Railroad is reported as saying that grading will begin August 15 with 100 convicts secured from the State. Line from Elkin to Sparta 50 miles.

Elkins, W. Va.—Mr. J. E. Morgan, vice-president and general manager of the Elkins Electric Railway Co., writes the Manufacturers' Record that the company will do its own construction, building a line in Elkins and also an extension from Elkins to Belington, W. Va., 12 miles, and possibly farther. Taylor & Taylor of Elkins, W. Va., are the engineers. J. C. McSpadden is president and W. K. Taylor secretary and treasurer.

El Paso, Texas.—The Galveston, Harrisburg & San Antonio Railroad Co. (Southern Pacific system) is reported to have purchased about 82 acres of land eight miles east of El Paso for the purpose of building yards. A. V. Kellogg is engineer maintenance of way at Houston, Texas.

England, Ark.—Preliminary steps are reported to extend the England & Clear Lake Railway to Lonoke, Ark., and thence to the Arkansas river and a connection with the Iron Mountain Railroad, connection with the Rock Island being made at Lonoke. J. E. Hicks is president and general manager at England.

Englehard, N. C.—W. H. Jennette is reported as saying that construction will begin immediately on the proposed railroad from Englehard to Washington, N. C. Survey has been made from Englehard to Belhaven, N. C.

Enid, O. T.—The Enid, Blackwell & Osage

Interurban Traction Co. has been chartered, with headquarters at Enid and capital of \$1,000,000, to build from Enid to Pawhuska, 85 miles. The incorporators are George W. Bear, Frank Bradfield, S. I. Hudkins, John R. Clover, A. W. McQuilkin, T. C. Cone and Guy S. Manatt, all of Enid.

Eunice, La.—J. J. Lewis and Gus Fuselier of Eunice, Charles D. Caffery and E. G. Voorhies of Lafayette, La., are reported to be working on the plan to build a railroad from Eunice via Lafayette to Abbeville, La.

Fayetteville, N. C.—The East Carolina Railway Co. is reported to have completed about nine miles on the Hookerton extension. H. C. Bridgers and others are interested.

Fort Worth, Texas.—Gideon R. Turner, promoter of the proposed electric railway from Fort Worth to Mineral Wells, is reported to have made a trip over the route with M. C. Davis, civil engineer, and A. L. Cole. Efforts to raise stock subscriptions are under way, with Stuart Harrison as chairman of the committee.

Fort Worth, Texas.—Mr. Walter Goodenough, Southwestern manager for the Stone & Webster Engineering Corporation of Boston, informs the Manufacturers' Record that the corporation has made a number of preliminary surveys between Fort Worth and Cleburne, Texas, for the Northern Texas Traction Co., but location is not yet decided. E. C. Macy is engineer in charge; address, Wilson Building, Dallas, Texas.

Fort Worth, Texas.—The St. Louis Southwestern Railway has, it is reported, purchased three blocks of ground for building team tracks and other terminal improvements in the heart of the city. A new track about four miles long to reach the terminal will be built from the main line near North Fort Worth. Work is expected to begin in November; to cost about \$250,000. M. L. Lynch is chief engineer at Tyler, Texas.

Fort Worth, Texas.—The Missouri, Kansas & Texas Railway, it is reported, has purchased two tracts of land in the southern part of the city and will build terminal facilities. J. W. Petheram is chief engineer at Dallas, Texas.

Galveston, Texas.—The Galveston, Houston & Henderson Railroad is grading a tract of land between 37th and 41st streets and Avenues E and F preparatory to laying four or five miles of yard track. J. H. Hill is manager at Galveston.

Hagerstown, Md.—E. V. Aler, attorney, Hagerstown, and associates are reported to be working on the proposition to build an electric railway connecting Hagerstown and Williamsport, Md., and Martinsburg, W. Va.

Hattiesburg, Miss.—Theodore Hemingway, contractor, is reported as saying that good progress is being made on grading the extension of the Mississippi Central Railroad from Hattiesburg south, 30 miles; terminal to be at Pascagoula.

High Point, N. C.—Construction is reported begun on the proposed line of the Carolina Valley Railway Co. at High Point. Dee Allen is president.

Houston, Texas.—The Kirby Lumber Co. is reported to be building a new railroad 18 miles long out of Cleveland, Texas. It has now altogether about 30 miles of tramroad under construction.

Houston, Texas.—The Houston Belt & Terminal Co. has decided to issue \$147,000 of notes to begin construction on its freight terminal in the Third Ward. W. E. Green is president.

Kansas City, Mo.—According to a press report, the St. Louis & San Francisco Railroad will build second track upon its line between Kansas City and Springfield, Mo. J. F. Hinckley is chief engineer at St. Louis, Mo.

Knoxville, Tenn.—Norman B. Ream of Chicago and associates are reported to have engineers at work making a survey for a railroad between Moccasin Gap, Va., and Blaine, near the northern line of Knox county, Tennessee. Mr. Ream is interested in the Seaboard Air Line, and with his associates has, it is reported, purchased the charter of the proposed Knoxville & Eastern Railroad.

Knoxville, Tenn.—W. A. Seymour is reported to have begun survey for the proposed Knoxville, Sevierville & Eastern Railway from Shooks to Sevierville. It will be continued to Knoxville or Rockford.

Knoxville, Texas.—The Knoxville, Sevierville & Northeastern Railroad Co. has elected directors as follows: President, C. S. McManus; vice-president, S. B. Luttrell; secretary and treasurer, E. G. Oates; general counsel, Jerome Templeton; W. P. Chamberlain, Alexander McMillan and D. M. Rose. Sevier county will be asked to subscribe \$50,000 in county bonds. R. A. Chester, president of the United States Trust Co. of Washington and F. C. Stevens, also of that

city, are reported to be interested. W. J. Oliver of Knoxville, who is a vice-president of the trust company mentioned, will, it is said, build the road.

Lexington, Ky.—The Central Kentucky Traction Co. is to hold a special meeting of stockholders on August 1 to act upon its consolidation with the Frankfort & Versailles Traction Co. Louis Des Cognets is president.

Mangum, O. T.—Morris R. Locke, president of the Colorado, Texas & Mexico Railway Co., is reported to have completed arrangements to sell \$5,000,000 of 5 per cent. bonds to an English syndicate. The line first to be built is from Mangum, O. T., to Abilene, Texas, with three branches, namely, from Gladys to Hallis, O. T.; from Blackburn to Vernon and from Cockrell to Merkel, Texas.

McAlester, I. T.—Reported that the Mid-continent Traction Co. has been chartered to build an interurban electric railway connecting Red Fork, Tulsa, Sapulpa and the Glenn Oil Pool.

Nashville, Tenn.—A dispatch from New York reports that officers of the Carnegie Trust Co. are considering a proposition to finance an interurban railway at Nashville, Tenn. Concerning this President Leslie M. Shaw of the Trust Company writes the Manufacturers' Record that the company is not financing the railway, although it has under consideration a modest loan to local capitalists, but its security is in no measure dependent upon the success of the railway enterprise.

Navassa, N. C.—The first spike is reported driven on the proposed Wilmington, Brunswick & Southern Railroad. Z. W. Whitehead of Wilmington is president.

New Orleans, La.—An officer of the Gulf, Colorado & Santa Fe Railway writes the Manufacturers' Record that the company is not contemplating any extension into New Orleans. This denies a recent press report that it would build from Oakdale to the Crescent City.

Paducah, Ky.—The Southern Interurban Railway Co. is reported to be pushing plans for its electric railway from Paducah to Mayfield and Fulton, Ky., and other points south. The Southern Construction Co. has also been incorporated with \$10,000 capital stock to build the line. D. H. Scott, H. H. Loving, John F. Harth, George Rush and others are the incorporators.

Pascagoula, Miss.—Mr. Martin Turnbull writes the Manufacturers' Record that he has undertaken the promotion of an electric railway from Mobile to Pascagoula, 40 miles. It is intended to organize the company, capitalized at \$500,000, probably under the name of the Grand Bay Electric Railway Co. of Pascagoula. The Bay Shore Railroad, from Mobile to Portersville, Ala., may be absorbed.

Pennington Gap, Va.—The Virginia & Southwestern Railway is reported to have laid nearly eight miles of track on the extension of the Black Mountain Railway from Imboden to coal mines.

Pensacola, Fla.—All bids are reported rejected for building 20 miles each on the Pensacola, Alabama & Western and the Pensacola & Northeastern Railroad, and new bids are to be asked, it is reported, for building altogether 105 miles, of which 85 miles will be the entire length of the Pensacola & Northeastern to Andalusia, Ala. The Interstate Contract Co., represented by B. K. Roberts, 224 Brent Building, has charge and J. I. Miller is engineer.

Pensacola, Fla.—P. D. Dumont of New York is said to be promoting the Pensacola, Alabama & Western and the Pensacola & Northeastern railroads, for which bids have been received to build 20 miles on each. Contract may be let soon. B. K. Roberts, Interstate Contract Co., 224 Brent Building, is in charge. J. I. Miller is chief engineer.

Pine Bluff, Ark.—Charter is filed for the proposed electric railway from Pine Bluff to Little Rock, Ark.; capital \$1,000,000; J. J. Fiske of Chicago, president; W. H. Langford of Pine Bluff, vice-president; J. M. Rose of Little Rock, secretary and treasurer. Other directors are O. P. Robinson, J. R. Alexander, M. E. Beakley, J. A. Gray and M. A. Lally. A branch is to be built to Stuttgart, Ark. The main line will be about 55 miles long. Harvey Flak & Co. of Chicago will have charge of the bonds.

Robert Lee, Texas.—Col. Austin Spencer of San Angelo, president of the Robert Lee & Fort Chadbourne Railway, is reported as saying that survey has been completed between the points named, and the distance from Robert Lee to Winters is 32 miles. The road is, however, chartered to build 55 miles.

Rogers, Ark.—The Rogers Southwestern Railway is reported to have completed grades

to Feiker, six miles from Siloam Springs, and track may be completed there within a week.

Rusk, Texas.—Survey is reported under way for the branch of the Texas & New Orleans Railroad from Gallatin to Rusk, eight miles. A. V. Kellogg is engineer maintenance of way at Houston, Texas.

San Antonio, Texas.—Reported that the Business Men's Club has decided to organize a construction company for carrying out the plan advocated by Col. Uriah Lott to build a railroad from San Antonio via Kingsville to Brownsville, Texas. The club's committee to raise \$50,000 necessary for the purpose is composed of W. C. Riggsby, Nat M. Washer, J. E. Jarratt, G. A. C. Half, Alex. Joske, George T. West and Charles Graebner.

San Antonio, Texas.—W. H. Grove of St. Louis and associates have, it is reported, offered, through N. B. Jones of San Antonio, to build a railroad from San Antonio to Brownsville or Kingsville via Pleasanton, on condition that \$100,000 will be subscribed and terminal facilities granted, but nothing will be asked until 35 miles are built. An engineer is selecting the desired terminal site.

Shawnee, O. T.—An officer of the Shawnee Central Railway Co. is reported as saying that its proposed line is from Shawnee to Muskogee, I. T., 75 miles, along the north fork of the Canadian river. Survey completed for about 50 miles and right of way obtained. F. H. Peckham is chief engineer at Shawnee.

Sherwood, Tenn.—Reported that the Nashville, Chattanooga & St. Louis Railway Co. is building spur tracks from Sherwood to coal lands owned by Mark Packard of West Virginia and associates in Franklin and Marion counties, Tennessee. W. D. Carswell, attorney-at-law, Chattanooga, is said to represent the owners. Hunter McDonald is chief engineer of the railroad at Nashville, Tenn.

St. Marys, Ga.—Capt. L. Johnson, promoter of the railroad from St. Marys to Kingsland, is reported as saying that grading is complete between the two points and that tracklaying is progressing, with prospect of early completion.

Spartanburg, S. C.—Among those interested in the proposed electric railway from Spartanburg to Gaffney, Charlotte and other points, which is being promoted by J. J. Hannon of New York, are Capt. R. M. Gaffney, Col. T. B. Butler, J. A. Carroll, J. E. Jefferies, W. W. Gaffney and W. H. Ross, all of Gaffney, S. C.

Tallulah Falls, Ga.—The Tallulah Falls Railway is reported to have been completed to Franklin, N. C.

Tennille, Ga.—A stockholders' meeting is called to consolidate the Wrightsville & Tennille Railroad Co. and the Dublin & Southwestern Railroad Co. under the name of the former and to authorize a bond issue of \$300,000 for improvements. The stock is to be increased from \$300,000 to \$600,000. A. F. Daley is president at Tennille, the two roads being owned by the same interests.

Tremont, La.—A. J. Hayes is reported to have begun work on a grading contract of the Tremont & Gulf Railroad at a point 23 miles west of Monroe, La.

Somerset, Ky.—Mr. J. M. Ross writes the Manufacturers' Record that the Somerset Commercial Club has called a meeting to raise \$40,000 for a railroad to be built from Somerset to the Cumberland river, seven and one-half miles. A grade of 1½ per cent. has been surveyed. About \$75,000 of bonds are to be issued.

Velasco, Texas.—The Velasco, Brazos & Northern Railway, it is reported, will build a 50-mile extension from Anchor to Houston, Texas. Felix Jackson is general manager at Velasco.

Waco, Texas.—Stephen Turner of Waco has, it is reported, been engaged to make a survey for the proposed Waco, Hamilton & Brownwood Railroad.

Warren, Ark.—Reported that the Warren, Jonesboro & Saline River Railway, a lumber road, has completed all but one mile of its line from Warren to Hermitage, 17 or 18 miles.

West Point, Ga.—The Chattahoochee Valley Railway Co. is reported to have let a contract to Hardaway & Wright of Columbus, Ga., to build 20 miles of proposed extension, with an option on the remainder of 12 miles. Work is to begin immediately. L. Lanier is president.

Wichita Falls, Texas.—Capt. Joseph A. Owens of Galveston is reported to have been awarded the contract to build the Wichita Falls & Southern Railway from Archer City to Olney, work to begin immediately.

Wiggins, Miss.—The Finkbine Lumber Co.



informs the Manufacturers' Record that it is considering an extension of about 20 miles to its logging road. It is not expected to make any connections nor to make the line a common carrier.

Whitney, N. C.—The Whitney Company, which is developing the water-power at the Yadkin River Narrows, is reported to be building a four-mile extension to its railroad to reach industrial sites. This will make the line 10 miles long.

Woodville, Fla.—The Woodville Railway Co. it is reported, has laid two and a fourth miles of track on its extension from Lander to Spring Hill, Fla., four miles. Thomas M. Hall is president at Woodville.

#### Street Railways.

Americus, Ga.—Mr. W. A. Dodson writes the Manufacturers' Record that charter for the Americus Railway & Light Co. will be granted about August 8. It is proposed to build four miles of street railway.

Claremore, I.T.—Reported that application will be made to the City Council for street-railway franchise, the promoters also proposing to build to Radium Wells, the fair grounds and Big Lake, about eight miles southwest. The Mayor may be able to give information.

Fayetteville, N. C.—The Chicago Electrical Co. is reported to have an agent in Fayetteville to obtain a franchise for an electric street railway.

Louisville, Ky.—The Louisville Railway Co. it is reported, will sell \$150,000 of short-term notes, the proceeds to be used for extensions, improvements and equipment.

Raleigh, S. C.—The Raleigh Electric Co. and the City Council are reported to have reached an agreement, as a result of which the proposed extension of three and one-half miles will be made.

Richmond, Va.—The receivers of the Virginia Passenger & Power Co. and of the Richmond Traction Co. have been authorized by the court to spend \$20,500 to improve tracks on Oakwood avenue. Work is to begin immediately.

San Angelo, Texas.—J. H. Ransom of Boulder, Col., and Hereford, Texas, is reported to be promoting his plans for a street railway in San Angelo, the franchise being now on its third reading in the City Council.

Waycross, Ga.—Mr. George W. Deen, president of the Deen Realty & Improvement Co., writes the Manufacturers' Record confirming the report that he has secured a franchise for a street railway. He is not, however, at present able to give information about the proposed construction.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.**

Air Compressor.—Edwards Mining Co., 216 Kentucky Title Building, Louisville, Ky., wants air compressor, capacity about 300 feet per minute; new or good second-hand.

Air-compressor.—See "Vacuum Cleaning Apparatus."

Air Drills.—Edwards Mining Co., 216 Kentucky Title Building, Louisville, Ky., wants two air drills; new or good second-hand.

Agricultural Implements.—See "Machinery and Implements."

Automobiles.—See "Machinery and Implements."

Bank Fixtures.—Whitesburg Banking Co., Whitesburg, Ga., wants banking fixtures. Address W. T. Jones, Cashier.

Barrel Machinery.—W. J. Keenan, 700 Gervais street, Columbia, S. C., wants description and prices of machinery for making regular barrels for turpentine, oil and whiskey trade; will need heading, stave machine, coopering and drying machines.

Belting.—Wm. C. Schramm, manager Excelsior Tube & Supply Co., 123 Pine street, St. Louis, Mo., wants prices on belting.

Boiler.—Sealed proposals will be received

until August 7 to supply city of Portsmouth with a spiral water-tube boiler for a third size La France steam fire engine. Specifications may be obtained from Charles E. Murden, chief engineer of fire department; I. G. Wilkerson, chairman; Chas. R. Welton, vice-chairman, Joint Fire Committee, Portsmouth, Va.

Boiler.—Edwards Mining Co., 216 Kentucky Title Building, Louisville, Ky., wants 50-horse-power boiler; new or good second-hand.

Boiler.—Abe Simon & Bro., Monticello, Fla., want boiler for ice plant.

Boiler.—J. J. Robinson, Lonaconing, Md., wants boiler. (See "Engine and Boiler.")

Boiler.—Falfurrias Power Co., James J. Allan, manager, Falfurrias, Texas, wants prices on high-pressure boiler; 125 pounds working pressure; 100 horse-power; complete with full square front; Hartford specifications.

Boiler.—Texas Rio Grande Canal Co., Brownsville, Texas, wants boiler. (See "Pumping Plant.")

Boilers.—Berlin Mining Co., Joplin, Mo., wants two 100-horse-power boilers.

Boilers.—Southwestern Chair Co., Geo. T. Sparks, secretary, Fort Smith, Ark., wants prices on boilers.

Bottling Machinery.—Charles Ellis, Andalusia, Ala., wants correspondence with manufacturers of bottling machinery.

Building Materials.—R. D. Mooney, Davidson, N. C., wants prices on iron columns and girders; also on plate glass.

Building Supplies.—Southwestern Chair Co., Geo. T. Sparks, secretary, Fort Smith, Ark., wants prices on building materials for chair factory.

Brick.—Sealed bids will be received until August 10 for 1,000,000 vitrified brick, best quality; standard sizes; delivery to begin August 20. Samples of brick must accompany all bids and be subjected to test; usual rights reserved. Address Mayor, Huntsville, Ala.

Bridge.—Sealed proposals will be received until August 10 for construction of concrete-steel bridge across track of Baltimore & Ohio Railroad, on line of Monroe street, Brookland, D. C. Blank forms of proposal, specifications and all necessary information may be obtained at office of Engineer Commissioner, District of Columbia; Henry B. F. Macfarland, Henry L. West, Jay J. Morrow, Commissioners District of Columbia, Washington, D. C.

Bridge Construction.—Sealed proposals in triplicate will be received at general depot of Quartermaster's Department, Washington, D. C., until August 20 for constructing bridge on military road to Fort Myer, Va. Plans and specifications can be obtained on application to above office; United States reserves usual rights. Envelopes containing proposals should be marked "Proposals for Bridge" and addressed to Major M. Gray Zallinski, Quartermaster, U. S. Army, Washington, D. C.

Canning Machinery.—P. G. Bowman, Sumter, S. C., wants information on machinery for small canning plant.

Cement.—See "Paving Materials."

Cement Machinery.—Piedmont Slate Co., E. C. Lester, secretary, 400 Austell Building, Atlanta, Ga., wants information and prices on machinery for making Portland cement.

Chair Machinery.—Southwestern Chair Co., Geo. T. Sparks, secretary, Fort Smith, Ark., wants prices on chair machinery.

Clayworking Machinery.—See "Terra-cotta Machinery."

Clocks.—J. G. Archer, Booneville, Miss., wants addresses of manufacturers of clocks for courthouse towers.

Concrete-brick Machinery.—Dallas Hydraulic Brick & Stone Co., W. S. Conner, Dallas, Texas, wants machinery for making concrete brick and stone by hydraulic power.

Concrete-mixers.—H. P. Taussig, 523 Victoria Building, St. Louis, Mo., wants prices on concrete-mixers.

Construction.—See "Electric Motors, etc."

Cooperage.—Victoria Company, 718 Saginaw street, Bay City, Mich., wants all kinds of cooperage stock; slack and tight barrel; also 10 to 100 cars of baled husks.

Copper Products.—P. F. Bergasse, 299 Rue Paradis, Marseilles, France, is preparing to represent American manufacturers of copper of all kinds—wire, bars, ingots, sheets, etc.

Cotton Yarns.—Lynchburg Hosiery Mills, Lynchburg, Va., wants to contract for 50,000 to 100,000 pounds of cotton yarns; cones; 12s by 14s.

Crane.—Kennesaw Marble Co., Marietta, Ga., wants proposals for installation of traveling crane.

Crushed Stone.—See "Paving Materials."

Crushing Plant.—Worcester Cement Stone Co., Worcester, Mass., wants portable crushing plant; capacity to be 50 tons daily; must be in good condition and at low price.

Desks.—Ruskin-Cave College, Ruskin, Tenn., in the market for new or second-hand school desks.

Desks.—N. A. Riggins, Lakeland, Fla., wants to buy carload of school desks.

Drainage and Grading.—Sealed proposals will be received until August 26 for draining and grading drill grounds at Fort Washington, Md. Plans and specifications will be furnished intending bidders upon deposit of \$10. Proposals must be marked "Proposals for Draining Drill Ground at Fort Washington, Md." and addressed to Constructing Quartermaster, U. S. A., Fort Washington, Md.

Dredging.—Sealed proposals for dredging Skidaway Narrows, Ga., will be received at Savannah, Ga., until August 23, 1907; information furnished on application; Dan C. Kingman, Lieutenant-Colonel, Engineers, U. S. A.

Drying Machinery.—W. J. Keenan, 700 Gervais street, Columbia, S. C., wants description and prices of drying machinery.

Drykilns.—Lucas Land & Timber Co., Waverly, Tenn., wants prices on drykilns.

Electrical Equipment.—Southwestern Chair Co., Geo. T. Sparks, secretary, Fort Smith, Ark., wants prices on electrical equipment.

Electrical Machinery.—Florence Wagon Works, Florence, Ala., wants alternating 100-kilowatt dynamo; in good operating condition.

Electrical Machinery.—C. Gresham, Mt. Airy, Ga., wants 50-kilowatt dynamo; second-hand.

Electrical Machinery.—Corydon Milling Co., Corydon, Ky., wants prices on dynamo, switchboard and complete installation for arc and incandescent lighting, except engine and boiler.

Electrical Machinery.—Office of Custodian, United States Postoffice and Courthouse, San Francisco, Cal.—Sealed proposals will be received until August 23 for furnishing and delivering motors, rheostats, chain drives, air-compressor, circuit-breakers, conduit, wire, etc., in accordance with specifications. Copy may be obtained at this office, at discretion of supervising architect.

Electrical Machinery.—Falfurrias Power Co., James J. Allan, manager, Falfurrias, Texas, wants prices on 250-light dynamo; also wires and lamps for buildings on three acres; not more than 300 lights.

Electric-lighting Fixtures.—J. J. Lissner, Brunswick, Ga., wants prices on electric-lighting fixtures.

Electric Motor.—Wm. C. Schramm, manager Excelsior Tube & Supply Co., 123 Pine street, St. Louis, Mo., wants prices on three-quarter-horse-power electric motor.

Electric Motors.—See "Machinery and Implements."

Electric Motors, etc.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until August 13 to perform work and furnish supplies at navy-yard, Charleston, S. C., as follows: Schedule 133—Construction of penthouse, cutting out rudder pit in dry dock. Schedule 149—Motors. Applications for proposals should designate schedules desired by number. Blank proposals furnished on application to Navy Pay Office, Charleston, or to Bureau; E. B. Rogers, Paymaster-General, U. S. N.

Elevator.—Shaler-Bidwell Building Co., 3624 Shaw avenue, St. Louis, Mo., wants prices on electric elevator for apartment-house.

Elevator.—Sealed proposals will be received until August 14 for two passenger elevators for United States courthouse, Washington, D. C. Specifications can be obtained on application; Elliott Woods, superintendent United States Capitol Building and Grounds.

Elevator.—John A. McClure, Hickman, Ky., will consider estimates on construction of elevator.

Elevator.—Eugene E. Robertson, Collins, Miss., is in the market for a hand-power elevator with lifting capacity of 2000 pounds, size 6x6; correspondents will please quote net cash price delivered f. o. b. Collins, and give full description; delivery by August 25.

Elevators.—H. P. Taussig, 523 Victoria Building, St. Louis, Mo., wants prices on bucket elevators; also on hoists.

Engine.—See "Hoisting Engine."

Engine.—A. P. Taylor & Co., Howell, Tenn., will want two-horse-power gasoline engine.

Engine.—Couch-Elder Manufacturing Co., Atlanta, Ga., is in the market for 12 to 15 horse-power gasoline engine.

Engine.—J. P. Winston, Louisville, N. C., wants about eight-horse-power gasoline engine for automobile.

Engine.—Eden Colony Fruit Co., Rock Branch, postoffice at Swann Station, N. C., wants seven-horse-power kerosene engine. (Mentioned lately without stating that Swann Station is the company's postoffice.)

Engine.—Berlin Mining Co., Joplin, Mo., wants 100-horse-power engine.

Engine.—Texas Rio Grande Canal Co., Brownsville, Texas, wants direct-connected engine for pump. (See "Pumping Plant.")

Engine.—Florence Wagon Works, Florence, Ala., wants second-hand 30 to 100-horse-power slide-valve engine; in good operating condition.

Engine.—C. Gresham, Mt. Airy, Ga., wants 50-horse-power engine; second-hand.

Engine.—Norfolk Hardwood Co., Norfolk, Va., wants gasoline engine; eight horse-power; new or second-hand.

Engine and Boiler.—J. J. Robinson, Lonaconing, Md., wants prices on 8 or 10-horse-power engine and boiler, latter for power and heating.

Engines.—Southwestern Chair Co., Geo. T. Sparks, secretary, Fort Smith, Ark., wants prices on engines.

Engines.—American Glass Works, 10-12-14 South 21st street, Richmond, Va., is interested in gas engines using producer gas.

Ensilage Cutter.—Norfolk Hardwood Co., Norfolk, Va., wants ensilage cutter of five tons capacity per hour.

Flour-mill Machinery.—Corydon Milling Co., Corydon, Ky., wants prices on 100-barrel flour and meal mill, except power.

Heating Plant.—Wheeler, Runge & Dickey, Charlotte, N. C., receiving propositions for hot-air or steam-heating plant for schools at Gaffney, S. C.

Heating Plant.—J. J. Robinson, Lonaconing, Md., wants prices on steam-heating plant for printing plant.

Hoisting Engine.—Tennessee Marble Lime Co., Knoxville, Tenn., wants small single-drum single-cylinder hoisting engine, without boiler, 6x7 cylinder.

Hoists.—See "Elevators."

Husks.—See "Cooperage."

Ice Machine.—D. L. Casey Machine Co., Springfield, Ohio, wants five to six-ton ice machine.

Ice Machinery.—Charles Ellis, Andalusia, Ala., wants correspondence with manufacturers of ice machinery.

Ice Plant.—Corydon Milling Co., Corydon, Ky., wants prices on six to eight-ton ice plant, except boiler.

Ice Plant.—Abbeville Ice, Laundry & Fuel Co., Abbeville, S. C., wants 10 or 15-ton ice plant. Address Geo. M. Beasley.

Ice Plant.—Abe Simon & Bro., Monticello, Fla., want ice plant; second-hand; without boiler; not smaller than 10-ton, but 15 or 25-ton preferred; to make 200-pound block 16x16x32; will buy new boiler; plant to be guaranteed.

Ice Plant.—Lillard-Hankins Company, 117 East Markham street, Little Rock, Ark., wants to correspond relative to estimates on \$100,000 ice plant, also on a \$25,000 ice plant.

Implements.—Auguste Boues, 21 Boulevard Perier, Marseilles, France, wants agency in Buenos Ayres for manufacturer of agricultural implements.

Iron Works.—See "Building Materials."

Jetty Construction.—Sealed proposals for building jetties at Biscayne Bay, Fla., will be received at United States Engineer Office, Jacksonville, Fla., until August 26; information on application; Francis R. Shunk, Major, Engineers.

Jetty Construction.—U. S. Engineer Office, 22d and K streets N.W., Washington, D. C.—Sealed proposals for constructing riprap jetties in Ocoquan, Nomini and Urbana creeks and Millford Haven, Va., will be received until July 29, 1907. Information furnished on application. Spencer Cosby, Major, Engineers.

Kegs.—Virginia Bridge & Iron Co., Roanoke, Va., wants a carload of kegs for rivets.

Lathe.—Hans Rees' Sons, Asheville, N. C., want small second-hand machine lathe to take up 10-foot to 12-foot shaft; to be operated by direct power electrically.

Lathe.—John G. Duncan Company, 308 West Jackson avenue, Knoxville, Tenn., wants dealers' prices on engine lathe; 26 to 36-inch swing; 3 to 10 feet between centers; second-hand, good operating condition; immediate shipment.

Laundry.—Abbeville Ice, Laundry & Fuel Co., Abbeville, S. C., wants steam-laundry equipment. Address Geo. M. Beasley.

**Laundry Plant.**—Lillard-Hankins Company, 117 East Markham street, Little Rock, Ark., wants to correspond relative to estimates on \$50,000 steam-laundry plant.

**Levee Construction.**—Bids will be opened August 10 for levee construction; about 10,000 feet; three miles from Hawkins, Texas; plans and specifications on file with A. W. Campbell, 240 Main street, Dallas, Texas.

**Linotype Machine.**—Mannington Printing Co., Mannington, W. Va., will buy linotype machine.

**Machine Tools.**—Industrial Iron Works, Clinton, Mo., wants prices on machine tools.

**Machine Tools.**—See "Lathe."

**Machinery and Implements.**—Helman Mannheim, Nizankowice, Gallizien, Austria-Hungary, is endeavoring to arrange for representing American manufacturers of agricultural implements and machinery, motors, automobiles and writing machines.

**Machine Tools.**—See "Punch and Shear."

**Mattress Machinery.**—R. B. Powell, Henderson, N. C., wants prices on machinery for mattress factory.

**Mechanical Equipment.**—Sealed proposals in triplicate will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., not later than August 14 for furnishing by steamer, free of all charges, on dock at either Colon (Atlantic port) or La Boca (Pacific port), Isthmus of Panama, the articles hereinafter specified: Track scales, motor car, railway water tanks and accessories, duplex pumps, boilers, steel, brass, taper pins, drag scrapers, friction wheels for dredge, dipper lips for steam shovels, ore cement, life preservers, rafts and buoys, sand and stone sieves, agate bearings, mechanical shakers, cement-testing apparatus, thermometers, drafting machines, white-edge scales, etc. Copies of Circular No. 381 may be obtained from this office of offices of assistant purchasing agents, 24 State street, New York; Custom-house, New Orleans; 1086 North Point street, San Francisco, and 410 Chamber of Commerce, Tacoma, Wash.; also from Chief Quartermaster, U. S. Army, Chicago; Depot Quartermaster, U. S. Army, St. Louis; Depot Quartermaster, U. S. Army, Jeffersonville, Ind.; Chief Quartermaster, U. S. Army, Atlanta; Chamber of Commerce, Los Angeles; Business Men's League, Kansas City; Chamber of Commerce, Quincy, Ill.; Commercial Club, Mobile; Philadelphia Bourse, Philadelphia, and Merchants' Association, Boston.

**Mill Supplies.**—Southwestern Chair Co., Geo. T. Sparks, secretary, Fort Smith, Ark., wants prices on mill supplies.

**Naval Supplies.**—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until August 6 to furnish at navy-yard, Norfolk, naval supplies as follows: Schedule 94—Turret lathe. Schedule 118—Arches and jamb bricks, retort cement, boiler tubes. Schedule 125—Gauge glasses and grommets. Schedule 128—Miscellaneous packings. Schedule 131—Portland cement. Schedule 132—Blueprint paper and cloth, solar paper, drawing paper and materials, photographic materials. Applications should designate schedules desired. Blank proposals furnished on application to Navy Pay Office, Norfolk, or to bureau; E. B. Rogers, Paymaster-General, U. S. N.

**Paving.**—Board of Affairs, Charleston, W. Va., will receive sealed bids until July 30 for grading, curbing and paving Kanawha street from Court to Summers street, with privilege of extending paving from Summers to Capitol street at same figures, according to plans and specifications on file in office of H. A. Hogue, City Engineer, Charleston, W. Va.; usual rights reserved.

**Paving Materials.**—W. J. Grantham, Greensboro, N. C., wants prices on crushed stone and cement.

**Paving Work.**—City of Marshall, Texas, will open proposals August 14 for construction of 22 miles of concrete sidewalks and street crossings. Plans and specifications can be seen at office of William Bradburn, City Engineer, or at office of City Secretary, H. S. Rice.

**Pipe (Sewer).**—J. B. Evans, Clinton, Ky., wants one mile of 10-inch sewer pipe.

**Piping.**—A. P. Taylor & Co., Howell, Tenn., will want one-inch and two-inch piping.

**Piping (Stack) Machinery.**—See "Smokestack Machinery."

**Plate Glass.**—See "Building Materials."

**Plumbing Supplies.**—J. J. Robinson, Lonaconing, Md., wants prices on bathroom and lavatory supplies.

**Printing Machinery.**—Mannington Printing Co., Mannington, W. Va., will buy linotype machine, large job press and newspaper press.

**Producer-gas Equipments.**—See "Engines." American Glass Works want.

**Pump.**—A. P. Taylor & Co., Howell, Tenn., will want pump to lift water 27 feet and elevate it 40 feet.

**Pumping Engines.**—Louisville Water Co., by S. Zorn, president board of Water-works, Louisville, Ky., will open proposals September 8 for pumping engines, as follows: Compound beam and flywheel pumping engine of Leavitt type, 16,000,000 gallons capacity in 24 hours; compound beam and flywheel pumping engine of Leavitt type, 20,000,000 gallons capacity in 24 hours; vertical triple-expansion crank and flywheel pumping engine, 24,000,000 gallons capacity in 24 hours. (Bids will be received for three different types, as stated; only one to be adopted.) Bids also for two horizontal firebox tubular Belpaire boilers; vertical triple-expansion crank and flywheel pumping engine, 24,000,000 or 30,000,000 gallons capacity in 24 hours, for Crescent Hill station; battery of two boilers similar to those now at Crescent Hill. Specifications, with plans of houses, pump pits, etc., will be furnished on application to Louisville Water Co.; each bidder to submit certified check for \$10,000; usual rights reserved.

**Pumping Plant.**—Texas Rio Grande Canal Co., Brownsville, Texas, in market for 12-inch pump with boiler and power for a 12-foot lift; direct-connected engine; will want 24-inch pump next spring.

**Punch and Shear.**—Wanted—Long & Allstatter punch and shear, to work  $\frac{1}{4}$  x 3 inches; best dealers' price and full information; new or second-hand will do; some other make might answer. Address Reaves-Scott Company, 235 Brown-Randolph Building, Atlanta, Ga.

**Road Construction.**—Sealed proposals addressed to Council Committee on Streets, Lynchburg, Va., and endorsed "Proposals for Construction of Macadam Roadway in Buchanan and 17th Streets," will be received at office of H. L. Shaner, City Engineer, Lynchburg, Va., until August 3. Each bid must be accompanied by certified check for \$300; bond for \$1500 required. All bids compared on basis of engineer's estimate of work; 1000 cubic yards excavation and 2600 square yards macadam roadway; usual rights reserved. For further information address City Engineer.

**Road Construction.**—Board of Supervisors York county, Yorktown, Va., will open proposals September 3 for construction of 65 per cent. of public road. Supervisors of Warwick county will meet at same time and place for opening proposals for 35 per cent. of said road; distance two miles. For plans and specifications apply to D. R. Norment, Magruder, Va., and B. P. Smith, Denbigh, Va.

**Safes.**—Shisler-Bidwell Building Co., 3624 Shaw avenue, St. Louis, Mo., wants prices on wall safes for apartment-house.

**Sash Clamp.**—Frank Wright, Cave Springs, Ga., wants sash clamp.

**Sash Weights.**—Henry Wels Cornice Co., 1811 Wyandotte street, Kansas City, Mo., wants several carloads of sash weights for delivery at various points.

**Saw.**—Wm. C. Schramm, manager Excelsior Tube & Supply Co., 123 Pine street, St. Louis, Mo., wants power hack saw.

**Sawmill.**—Jas. A. Dezell, Alamo, Fla., wants quotations on following, delivered Mt. Pleasant, Fla.: Circular-saw mill, complete with 30-foot carriage and three head blocks; cable feed; also without feed works for steam feed; mill to be used with 25-horsepower engine; also wants lathe mill, bolter and swing cutoff saw. Describe fully in detail.

**Sawmills.**—Lucas Land & Timber Co., Waverly, Tenn., wants prices on two sawmills.

**Sewer Pipe.**—See "Pipe (Sewer)."

**Sewer Pipe.**—Sealed bids will be received until August 10 for 50,000 feet 8-inch sewer pipe, 2500 8-inch by 4-inch Y, 2000 feet 10-inch sewer pipe, 120 10-inch by 4-inch Y, 750 feet 12-inch sewer pipe and 40 12-inch by 4-inch Y; grades one and two; f. o. b. Huntsville, Ala.; delivery to begin August 20; usual rights reserved. Address Mayor, Huntsville, Ala.

**Sewer Pipe.**—Sealed proposals will be received at office of City Clerk, Portsmouth, Va., addressed to "Sewerage Committee," until August 8 for furnishing and distributing on grounds of United States Naval Hospital: 48 lineal feet of 30-inch cast-iron pipe; one-quarter bend of 30-inch cast-iron pipe; 36 lineal feet of 24-inch cast-iron pipe; all joints of iron pipe other than quarter bend must be in lengths of 12 feet, with bell and spigot joints, and each joint and bend must be tested to withstand a pressure of 300 pounds per square inch; 972 lineal feet of No. 1 double strength vitrified sewer pipe 27 inches in diameter, length of joints 24 inches each; 1034 lineal feet of No. 1 double strength vitrified sewer pipe 24 inches in diameter,

length of joints 24 inches each; six joints of 24-inch T. C. pipe, must have one four-inch Y each; cast-iron pipe must be bid for at so much per ton of 2000 pounds delivered; vitrified pipe must be bid for at so much per lineal foot delivered. All pipe must be delivered not later than September 14. Bids will be received for either vitrified pipe or cast-iron pipe, or both together; A. Aug Bilsoly, M.D., Wm. Jones Williams, chairman Sewerage Committee; Bascom Sykes, City Engineer.

**Sewer-pipe Machinery.**—See "Terra-cotta Machinery."

**Sewers (Clay Pipe).**—City of Arkadelphia, Ark., will open proposals August 15 for construction of 45,250 feet of clay-pipe sewers. Plans, specifications and other data can be had of Theo. Hartman, engineer in charge, 1122 Center street, Little Rock, Ark., or J. E. Callaway, Arkadelphia. Commissioners of Sewer District No. 1 will receive the proposals.

**Slate Roofing.**—Joe Schad, Box 81, Wilmington, N. C., wants prices on slate roofing for warehouse costing \$24,000.

**Slot Machines.**—Otto Waser, 2 Calvinstrasse, Berlin, N. W., Germany, wants to represent manufacturers of automatic slot machines.

**Smokestack Machinery.**—Gibbes Machinery Co., 804 West Gervais street, Columbia, S. C., in market for complete equipment of tools to make smokestack of all sizes.

**Steel.**—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until August 13 to furnish at navy-yard, Norfolk, bar and sheet steel. Applications for proposals refer to Schedule 150. Blank proposals furnished on application to Navy Pay Office, Norfolk, or to bureau; E. B. Rogers, Paymaster-General, U. S. N.

**Tank and Tower.**—A. P. Taylor & Co., Howell, Tenn., will want 40-foot tower and a galvanized tank with 5000 gallons capacity.

**Terra-cotta Machinery.**—W. D. Hayes, 1124 Candler Building, Atlanta, Ga., wants estimates on cost of plant for manufacturing hollow terra-cotta partition tile, building blocks, vitrified brick, sewer pipes and other clay products.

## INDUSTRIAL NEWS OF INTEREST

### Mr. Joseph W. Zipperlein.

An announcement that will be seen with regret by many personal and business associates, in the cement-using branches especially, is the death of Joseph W. Zipperlein, vice-president of the Wm. G. Hartranft Cement Co. of Philadelphia.

### Contracts to Southwestern Bridge Co.

Among the important contracts awarded recently to the Southwestern Bridge Co. of Joplin, Mo., was that for the steel buildings for the machine shop and foundry of the Bartlesville (I. T.) Foundry and Machine Works; another was to manufacture and erect a 50,000-gallon tank and power at Sayre, O. T.

### Eagle Belting Co.

An increasing demand for the Eagle Belting Co.'s product is evidenced in that company's action last month in purchasing an additional building. The company bought a six-story structure 38x38 feet and a one-story building 10x88 feet for office and store-room. By acquiring the property the Eagle Belting Co. of Cincinnati, Ohio, will augment its facilities for manufacturing and marketing belting.

### The Pickering Sale.

General satisfaction was met with in the Pickering Manufacturing Co. property sale last week. This property is located at Lowell, Mass., and Messrs. J. E. Conant & Co. of that city were in charge. They sold the mill buildings, engine, boilers and land in one lot for \$45,000; machinery equipment for \$7500. Representatives of well-known textile manufacturers were present.

### Demand for Powhatan Bricks.

Continued large demands are reported for the Powhatan cream-white, silver-gray and salt-and-pepper speckled gray-face brick for many prominent buildings in the North and for many residences, stores and small buildings in the South. Recent contracts were for Jefferson and Murphy's hotels, Richmond, Va.; Five Points Methodist Church, Birmingham; Southern Passenger Station, Knoxville; Mobile Terminal Station, Stahlman 12-story office building, Nashville; Hi-bernia bank and office building, New Orleans; Atlanta, Birmingham & Atlantic office building, Atlanta; St. Lawrence Cath-

Tile Drain Pie.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until August 13 to furnish at naval station, New Orleans, a quantity of tile drain pipe, etc. Applications for proposals should refer to Schedule 140. Blank proposals furnished on application to Navy Pay Office, New Orleans, or to bureau; E. B. Rogers, Paymaster-General, U. S. N.

**Tools.**—See "Smokestack Machinery."

**Typewriters.**—See "Machinery and Implements."

**Vacuum Cleaning Apparatus.**—Shisler-Bidwell Building Co., 3624 Shaw avenue, St. Louis, Mo., wants prices on vacuum cleaning apparatus for apartment-house.

**Varnish.**—Auguste Boues, 21 Boulevard Perier, Marseilles, France, wants agency in Buenos Aires for manufacturers of varnish.

**Water-works.**—J. B. Goodman Mercantile Co., Spring Hill, Ala., wants information on pneumatic tank system of water supply and prices on required machinery.

**Water-works.**—O'Neill Engineering Co., Dallas, Texas, will soon invite bids for machinery and construction supplies for \$35,000 water-works at Homer, La.

**Water-works Equipment.**—A. P. Taylor & Co., Howell, Tenn., will want two-horse-power gasoline engine, galvanized tank with 5000 gallons capacity, 40-foot tower, 2000 feet two-inch black pipe, non-freezing two-inch hydrant, some one-inch and two-inch piping, and pump to lift water 27 feet and elevate 40 feet.

**Well Drillers.**—Charles French Toms, Hendersonville, N. C., wants to correspond with contractors to drill oil wells.

**Woodworking Machinery.**—See "Chair Machinery."

**Woodworking Machinery.**—See "Sawmill."

**Woodworking Machinery.**—See "Barrel Machinery."

**Woodworking Machinery.**—Lucas Land & Timber Co., Waverly, Tenn., wants prices on end-matched flooring machinery and column-boring machines.

**Woolen-mill Machinery.**—W. E. Ligon, Lebanon, Tenn., wants to correspond with makers of woolen-mill machinery.

olic Church, Asheville, N. C.; University buildings, Chapel Hill, N. C.; Geo. W. Clark building, Jacksonville, and Baronne Improvement Co. building, New Orleans, La. The Powhatan Clay Manufacturing Co. of Richmond manufactures the bricks.

### Cotton Mills for Sale.

Two established cotton-mill properties in the South are to be offered for sale on August 28. They are the Vermont Mills and the Whetstone Cotton Co., both of Bessemer City, N. C. These plants are equipped with modern machinery for spinning and weaving, and their offer constitutes an excellent opportunity for engaging in the Southern cotton-manufacturing industry. Mr. L. L. Jenkins, receiver for both properties, will give full information to parties who may want to investigate.

### The Grammes Circular-Saw Vise.

Messrs. L. F. Grammes & Sons of Allentown, Pa., manufacture a circular-saw vise that can be tilted to any position, because it works on a swivel and on an axis. For this reason it is a vise that conforms itself to every imaginable special toothed saw or circular cutter. The material of the vise is iron and steel, and its construction is such that it cannot vibrate while the flier is operating it. The vise is shipped to responsible parties on 30 days' trial. It is made in three sizes: No. 1, for saws 4 to 9 inches diameter; No. 2, for saws 6 to 14 $\frac{1}{2}$  inches diameter, and No. 3, for saws 12 to 20 inches diameter.

### Watkins Machinery & Foundry Co.

As evidencing the constant expansion of Southern industries, it may be mentioned that the Watkins Machinery & Foundry Co. of Hattiesburg, Miss., is now building engines and sawmill machinery. The company has a general foundry and machine plant in operation and finds the demand constantly increasing for its products. The demand for engines and sawmill machinery made it advisable to be in a position to meet the trade conditions in the South, and the engines noted are of the balanced slide, valve center and side-crank type. Besides giving attention to general mill and machinery, new and repair work, the Watkins plant is prepared to repair locomotives and is receiving many orders of this class.



**"Ideal" Machines for Mexico.**

There has recently left the factory of the Ideal Concrete Machinery Co. of South Bend, Ind., the third carload of a four-car shipment of Ideal concrete-block machines to Mexico. The fourth carload is practically ready for shipment and will go forward at an early date. Heavy shipment of the Ideal machines to foreign countries is becoming so frequent as to be regarded as quite an ordinary occurrence. Shipments have recently been made to Valparaiso, Chile; Panama, Central America; Khartum, Sudan, Egypt; Glasgow, Scotland; Budapest, Hungary; Bucharest, Roumania, and elsewhere.

**Establishes Branch Office at Greensboro, N. C.**

In consequence of the demand for power plants, general machinery and mechanical supplies various well-known companies are continually adding to their facilities for meeting the trade conditions of the South. A branch office has just been established at Greensboro, N. C., by the American Engineering & Supply Co. of Richmond, Va., for the purpose of handling engines, boilers, general machinery and supplies, and territory tributary to Greensboro will be given attention from that city, thus affording prompter service than from Richmond. Buyers who may be in the market are invited to apply for quotations.

**TRADE LITERATURE.****Dry Materials in Plants.**

"Drying Materials in Industrial Plants" is the title of a pamphlet issued by the Green Fuel Economizer Co. of Matteawan, N. Y. The publication refers to the drying of various materials, as fabrics, cloths, malt, lumber, baking powder, paper, pulp, sugar, etc., besides describing and illustrating the fans, blowers, steam coils, etc., manufactured by the company for use in drying plants.

**A Study in Black and White.**

A unique and original pamphlet has been issued by the Pittsburgh Automatic Vise & Tool Co., Pittsburgh, Pa. It illustrates the special automobile and motor-boat vise. The entire book is in black and white, and each subject is plainly and concisely dealt with. Due to the special class of people it is intended for, as little descriptive matter as possible is given, everything being described in black and white pictures.

**To Waterproof Cement Work.**

A booklet has been issued to present in a concise yet thorough way the value and advantages in using Maumee waterproofing compound in all cement construction. This compound is an extremely fine powder, which enters into the material itself in dry form, thus becoming a constituent part of the concrete mass. Full particulars can be read in the booklet, which is issued by the Maumee Chemical Co., manufacturer of the compound. Address the offices at 512 St. Clair Building, Toledo, Ohio.

**Sullivan Mining Hoists.**

An interesting illustrated pamphlet is now being distributed for the benefit of people who want to be informed regarding mining hoists. It tells about the development of mining hoists, especially in connection with the demand for equipments combining power, capacity and hoisting speed, to permit of taking out ores at a minimum expense. Sullivan mining hoists are the special equipments of which the pamphlet gives details. They are made by the Sullivan Machinery Co., Railway Exchange, Chicago, Ill., where requests for copy can be addressed.

**Tanks, Towers and Tubs.**

When in the market for tanks, towers and tubs it is of advantage to be acquainted with the facilities of the W. E. Caldwell Company, Louisville, Ky. This company is now distributing its 19th annual catalogue, which contains timely information and data of assistance to managers of plants, owners of buildings and others who may need tanks and tubs for any liquid. Caldwell offerings are of receptacles made of either steel or wood as the occasion may require or as may be preferred by the buyer, and the vessels are built in the smallest as well as the largest sizes.

**Richmond Electric Co. Bulletins.**

When Tesla's patents expired in 1905 the Richmond Electric Co. of Richmond, Va., placed on the market its line of two and three-phase induction motors. In designing these machines the company followed European practice changed to suit American conditions, and has been successful in its efforts

to introduce electrical machinery of Southern manufacture. The R. E. type polyphase induction motor built by the company is the subject of Bulletin No. 8 which has been issued to describe and illustrate the equipments. Inquiries for that bulletin and for No. 9 are invited.

**The Emmert Vises.**

There is scarcely an industry which does not have use for the vise, and this tool is used extensively. There has been a large demand created for the Emmert patent universal and standard vises, which are designed so as to be very much like the human hand in operation. The gripping of the digits, the rolling of the hand and forearm, the drawing extension of the elbow and the swinging of the arm in circuits are all quite fully provided for in the movements and positions secured by the use of these vises. A new catalogue describing and illustrating the Emmert vises is being distributed by their manufacturer, the Emmert Manufacturing Co., Waynesboro, Pa.

**Water Filter and Grease Extractor.**

The Blackburn-Smith feed-water filter and grease extractor is described in a catalogue which has just been issued. This filter is for the removal of organic matter, sediment, lubricating oils, etc., from boiler-feed water and for the removal of any matter in mechanical suspension in liquids where economy or quality of product is affected by the presence of such matter. Among the subjects treated in this catalogue are "Effect of Oil on the Boiler," "Utilization of Condensed Water From Heating Systems and Condensers," "Methods of Treating Feed Water," "The removal of Oil From Condensation," etc. The Blackburn-Smith feed-water filter is manufactured by James Beggs & Co., No. 109 Liberty street, New York, who will send catalogue upon request.

**Expansion and Toggle Bolts.**

It will probably be conceded by those versed in such articles that the essentials of a perfect expansion bolt are strength, ease in using, smallness of the hole to be drilled, possibility of using expansion parts with all regular bolts and screws. These features are claimed to be fully embodied in the expansion and toggle bolts and allied lines manufactured by the Star Expansion Bolt Co. of 147 Cedar street, New York. All styles of expansion bolts are offered, either complete or shields only. These products of the company are described, the text being accompanied by various illustrations, in catalogue No. 16, which the company has issued recently. Those who are interested in such articles should be informed of the Star bolts by perusing the company's catalogue. Copies on application.

**An Attractive Southern City.**

Many are the attractive cities in the South, both as homes for home-loving people and business locations for enterprising merchants, manufacturers and mechanics. One of these cities is Dalton, Ga., sometimes referred to as the gem of the beautiful blue Couthah mountains. An interesting booklet, giving full details of Dalton's advantages and qualities, has been issued. It tells of the population, health, climate, schools, history, agriculture, good roads, mineral resources, labor conditions, commercial status, social factors and other attributes that will appeal to discerning ones thinking of locating in Southern territory. The booklet's illustrations assist in enabling the reader to appreciate what Dalton offers. Write for a copy, addressing the Dependable Real Estate & Fire Insurance Agency, Dalton, Ga.

**Norton Grinding Equipments.**

Buyers of grinding equipments are invited to note that the Norton Company of Worcester, Mass., has issued a new catalogue, superseding all previous editions. This publication gives full details, by description and illustration, of the Norton grinding wheels and machinery, composed of the best materials carefully selected and prepared that science and nature can produce. The principal abrasive used is aluminum, manufactured by the company at Niagara Falls by an electrical process. Samples from every lot of abrasive, as well as all the various materials for the bond, are analyzed to insure the use of the best only. Expensive tests of wheels in actual grinding are constantly carried on for the purpose of improving upon the present qualities. Norton wheels are manufactured by several different processes, including vitrified, elastic and silicate or semi-vitrified. The Norton product includes grinding wheels, aluminum, India oil stones, bricks and sticks for rubbing and sharpening, scythe stones, knife sharpeners, bath machine indicators, etc.

**FINANCIAL NEWS****Review of the Baltimore Market.**

Office MANUFACTURERS' RECORD,  
Baltimore, Md., July 31.

In the Baltimore stock market during the past week business was very dull, although prices were well sustained. In the trading United Railways common sold at 13 to 13½; do. trust certificates, 13½ to 13¾; the income bonds at 53¾; the funding 5s at 80½ to 80; the funding scrip from 80½ to 80; United 4s from 86½ to 87½; Consolidated Gas, Electric Light & Power preferred, 80; Gas 6s, 102½; do. 5s, 107½; Seaboard Company common, 13; Seaboard 4s, 70; do. 10-year 5s, 95; Consolidated Cotton Duck, 10½ to 11; do. preferred, 30½; Cotton Duck 5s, 79½ to 79¾; G. B. S. Brewing incomes, 22½.

Bank stock sold as follows: Maryland, 17; Howard, 12¼; Mechanics', 26; Farmers and Merchants', 50; Union, 114; Citizens', 33.

Mercantile Trust sold from 120½ to 120; United States Fidelity & Guaranty, 106½; Maryland Casualty, 61 to 60.

Other securities were traded in as follows: Northern Central Railway stock, 90 to 91; do. fractions, 89; Atlantic Coast Line Consolidated 4s, 94 to 94¼; Georgia & Alabama Consolidated 5s, 102½; Atlantic Coast Line of South Carolina 4s, 95½; Richmond & Danville debenture 5s, 102½ to 103; Virginia Midland 2ds, 105½; West Virginia Central 6s, 103½ to 102¾; Baltimore City 3½s, 1928, 97; do. 4s, 1925, 106; Norfolk Railway & Light stock, 17; do. 5s, 94; Atlanta & Charlotte extension 4½s, 98¾; Atlantic Coast Line stock, 97½; Atlanta Consolidated Street Railway 5s, 102; Charleston & Western Carolina 5s, 107; Georgia Southern & Florida 5s, 106; Fort Worth & Denver City 6s, 107¾; North Baltimore 5s, 110¾; Atlantic Coast Line of Connecticut 4s, certificates, 5-20s, 83; Anacostia & Potomac 5s, 100½ to 100¾; Macon Railway & Light 5s, 92½; United States Reducing & Refining preferred, 50.

**SECURITIES AT BALTIMORE.**

Last Quotations for the Week Ended July 31, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	97	98
Atlantic Coast of Connecticut.....	100	260	
Georgia Southern & Florida.....	100	20	30
Maryland & Pennsylvania.....	100	24	27
Norfolk Railway & Light.....	25	17	
Seaboard Company Common.....	100	12	13¼
Seaboard Company 1st Pfd.....	100	53	62½
Seaboard Company 2d Pfd.....	100	22½	23
United Railways & Elec. Co.....	50	13¼	13¾

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	32¾	33¼
Drovers & Mechanics Nat. Bk.....	100	240	
Farmers & Mer. Nat. Bank.....	40	48	
First National Bank.....	100	125	
German Bank.....	100	109	
Maryland National Bank.....	20	17	
Merchants' National Bank.....	100	172	
National Bank of Baltimore.....	100	116	
National Howard Bank.....	10	12¼	12¾
National Marine Bank.....	30	37½	
National Mechanics' Bank.....	10	25	26
National Union Bank of Md.....	100	113	115
Third National Bank.....	100	110	

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
Fidelity & Deposit.....	50	128	
Maryland Trust.....	100	65	63
Maryland Trust Pfd.....	100	86	82
Mercantile Trust & Deposit.....	50	130	
Title Guaranty & Trust.....	100	135	
Union Trust.....	50	68	
U. S. Fidelity & Guaranty.....	100	108	110

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron Pfd.....	100	75	
Con. Cotton Duck Common.....	50	9¼	10½
Con. Cotton Duck Pfd.....	50	29¾	31
Con. Gas, Elec. Lt. & P. Pfd.....	100	80	
Consolidated Coal.....	100	96	89½
Georges Creek Coal.....	100	74½	77½
Mt. Vernon-Woodby Cot. Duck.....	15		

Railroad Bonds.	Par.	Bid.	Asked.
Albany & Northern 5s, 1946.....	100	95	
Atlanta & Charlotte Ext. 4½s.....	100	98½	
Atlantic Coast Line 1st 4s, 1952.....	100	93¾	94
Atlantic Coast Line 4s, Cts., 1952.....	100	80¾	83
Atlan. Coast Line (S. C.) 4s, 1948.....	100	96	
Carolina Central 4s, 1949.....	100	90	93
Charleston & West. Car. 5s, 1946.....	100	108	
Char. Col. & Aug. 1st 5s, 1910.....	100	105½	
Char. Col. & Aug. 2d 7s, 1910.....	100	107½	
Columbia & Greenville 1st 5s, 1916.....	100	108	110
Georgia & Alabama 5s, 1945.....	100	116	102½
Georgia, Car. & North. 1st 5s, 1929.....	100	108	
Georgia Pacific 1st 6s, 1922.....	112	114½	
Georgia Sou. & Fla. 1st 5s, 1945.....	100	105½	106
Petersburg, Class A 5s, 1926.....	100	105	
Petersburg, Class B 5s, 1926.....	121	125	
Raleigh & Augusta 1st 6s, 1926.....	116½		
Richmond & Danville Deb. 5s.....	102½	104	
Savannah, Fla. & West. 5s, 1934.....	107		
Savannah, Fla. & West. 5s.....	123		
Seaboard Air Line 4s, 1950.....	69½	70	
Seaboard Air Line 5s, 10-year, 1911.....	96		
Southern Railway Con. 5s, 1994.....	106		
Virginia Midland 2d 6s, 1911.....	105	106½	
Virginia Midland 3d 6s, 1916.....	108		
Virginia Midland 4ths, 1921.....	105		
Virginia Midland 5th 5s, 1926.....	106		

Washington Terminal 3½s.....	87½	
Western Maryland new 4s, 1952.....	73½	74½
Western North Car. Con. 6s, 1914.....	107	
West Virginia Central 1st 6s, 1911.....	102½	103½
Wilmington, Col. & Aug. 6s, 1910.....	102½	
Wilmington & Wel. Gold 5s, 1935.....	109½	

**Street Railway Bonds.**

Anacostia & Potomac 5s, 1949.....	100½	101
Baltimore City Passenger 5s, 1911.....	102	
Baltimore Traction 1st 5s, 1929.....	107½	110
Central Ry. Con. 5s (Balt.), 1932.....	108	
Charleston City Railway 5s, 1923.....	103	104
City & Suburban 5s (Balt.), 1922.....	106½	
City & Suburban 5s (Wash.), 1945.....	102	
Knoxville Traction 1st 5s, 1928.....	100	103
Lake Roland Elevated 5s, 1942.....	110½	
Lexington Railway 1st 5s, 1949.....	99	
Macon Ry. & Lt. 1st Con. 6s, 1953.....	92	92½
Metropolitan 5s (Wash.), 1925.....	110	
Norfolk Railway & Light 5s.....	93	
North Baltimore 5s, 1942.....	110	111
United Railways 1st 4s, 1949.....	87	87½
United Railways Inc. 4s, 1949.....	53¾	54
United Rys. Inc. 4s, non-assessed.....	65	
United Railways Funding 5s.....	89½	

**Miscellaneous Bonds.**

Ala. Con. Coal & Iron 5s.....	85	90
Consolidated Gas 6s, 1910.....	102½	
Consolidated Gas 5s, 1933.....	107½	
Consolidated Gas 4½s.....	92	93½
G. B. S. Brewing 1st 4s, 1949.....	53	53½
G. B. S. Brewing 2d incomes.....	22½	23
Maryland Steel 5s.....	102	103½
Maryland Telephone 5s.....	97	
Mt. Vernon-Woodby Cot. Duck 5s.....	88	
Mt. Vernon-Woodberry Incs.....	60	80
United Elec. Lt. & Power 4½s.....	88½	91½

**SOUTHERN COTTON-MILL STOCKS.**

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending July 29.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	90	92
Aiken Mfg. Co. (S. C.).....	90	91
American Spinning Co. (S. C.).....	140	
Anderson Cotton Mills (S. C.).....	80	
Arkwright Mills (S. C.).....	110	115
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	125	
Belton Mills (S. C.).....	110	112
Bibb Mfg. Co. (Ga.).....	113½	
Brandon Mills (S. C.).....	125	126
Cabarrus Cotton Mills (N. C.).....	127	131
Chadwick Mfg. Co. (N. C.) Pfd.....	121	126
Chiquola Mfg. Co. (S. C.).....	115	120
Clifton Mfg. Co. (S. C.).....	115	120
Clinton Cotton Mills (S. C.).....	147	
Columbus Mfg. Co. (Ga.).....	96	101
Courtenay Mfg. Co. (S. C.).....	96	100
Dallas Mfg. Co. (S. C.).....	96	100
Darlington Mfg. Co. (S. C.).....	80	82
Eagle & Phenix Mills (Ga.).....	130	137½
Easley Cotton Mills (S. C.).....	140	
Enoree Mfg. Co. (S. C.).....	70	80
Enoree Mfg. Co. (S. C.) Pfd.....	99	100
Enterprise Mfg. Co. (Ga.).....	90	94
Exposition Cotton Mills (Ga.).....	225	
Gaffney Mfg. Co. (S. C.).....	92	95
Gainesville Cotton Mills (Ga.).....	59	65
Granby Cot. Mills (S. C.) 1st Pfd.....	163½	167½
Grantville Mfg. Co. (S. C.).....	97	100
Greenville Cotton Mills (S. C.).....	117	
Grendel Mills (S. C.).....	161	175
Henrietta Mills (N. C.).....	97	100
King Mfg. Co., John P. (Ga.).....	97	100
Lancaster Cotton Mills (S. C.).....	110	
Lancaster Cot. Mills (S. C.) Pfd.....	98	
Langley Mfg. Co. (S. C.).....	101	
Laurens Cotton Mills (S. C.).....	160	
Limestone Mills (S. C.).....	92	98½
Lockhart Mills (S. C.).....	97	100
Louise Mills (N. C.).....	90	96
Louise Mills (N. C.) Pfd.....	96	
Marboro Cotton Mills (S. C.).....	88½	93
Marzo Mills (S. C.).....	165	165
Mills Mfg. Co. (S. C.).....	110	
Mills Mfg. Co. (S. C.) Pfd.....	191	
Monaghan Mills (S. C.).....	109½	
Monarch Cotton Mills (S. C.).....	102	110
Newberry Cotton Mills (S. C.).....	138	150
Norris Cotton Mills (S. C.).....	111	120
Olympia Cot. Mills (S. C.) 1st Pfd.....	70	71
Orangeburg Mfg. Co. (S. C.) 1st Pfd.....	80	97
Orr Cotton Mills (S. C.).....	101	105
Pacolet Mfg. Co. (S. C.).....	175	
Pacolet Mfg. Co. (S. C.) Pfd.....	101	
Pelzer Mfg. Co. (S. C.).....	165	175
Piedmont Mfg. Co. (S. C.).....	165	175
Poe Mfg. Co. (S. C.).....	123	
Raleigh Cotton Mills (N. C.).....	100	105
Richland Cot. Mills (S. C.) Pfd.....	62½	
Saxon Mills (S. C.).....	150	167½
Sibley Mfg. Co. (Ga.).....	125	
Spartan Mills (S. C.).....	148	155
Springstein Mills (S. C.).....	100	
Trion Mfg. Co. (Ga.).....	137½	
Tucapaw Mills (S. C.).....	195	200
Union-Buffalo Mills (S. C.) 1st Pfd.....	71	73
Victor Mfg. Co. (S. C.).....	133½	135
Warren Mfg. Co. (S. C.).....	92	93½
Warren Mfg. Co. (S. C.) Pfd.....	103	
Washington Mills (Va.) Pfd.....	100	115
Whitney Mfg. Co. (S. C.).....	145	
Wiscasset Mills (N. C.).....	130	135
Woodruff Cotton Mills (S. C.).....	127	135

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending July 29.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	90	93
Aetna Cotton Mills (S. C.) Pfd.....	87	
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	125	
Anderson Cotton Mills (S. C.).....	80	
Arcadia Mills (S. C.).....	98	101
Arkwright Cotton Mills (S. C.).....	112	
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	
Belton Mills (S. C.).....	107	
Bibb Mfg. Co. (Ga.).....	115	
Brandon Mills (S. C.).....	125	
Brogan Mills (S. C.).....	85	92
Cabarrus Cotton Mills (N. C.).....	129	
Chadwick Mfg. Co. (N. C.) Pfd.....	103	
Chiquola Mfg. Co. (S. C.).....	129	
Clifton Mfg. Co. (S. C.).....	117	
Clinton Mfg. Co. (S. C.) Pfd.....	103	
Clinton Cotton Mills (S. C.).....	155	
Columbus Mfg. Co. (Ga.).....	94	
Courtenay Mfg. Co. (S. C.).....	100	
Dallas Mfg. Co. (S. C.).....	92	96
Darlington Mfg. Co. (S. C.).....	80	85
D. E. Converse Co. (S. C.).....	112	
Eagle & Phenix Mills (Ga.).....	138	135



Easley Cotton Mills (S. C.).....	130	138
Enoree Mfg. Co. (S. C.).....	76	82
Enoree Mfg. Co. (S. C.) Pfd.....	100	102
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	196	
Gaffney Mfg. Co. (S. C.).....	94	100
Gainesville Cotton Mills (Ga.).....	46	52
Glenwood Cotton Mills (S. C.).....	112	
Gluck Mills (S. C.).....	94	
Granby Cot. Mills (S. C.) 1st Pfd.....	50	98
Grantville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	94	98
Grendel Mills (S. C.).....	115	
Hartsville Cotton Mill (S. C.).....	120	
Henrietta Mills (N. C.).....	102	105
Inman Mills (S. C.).....	103	110
King Mfg. Co. J. P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	102	110
Lancaster Cot. Mills (S. C.) Pfd.....	92	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	152	160
Limestone Mills (S. C.).....	135	
Lockhart Mills (S. C.) Pfd.....	96	101
Loray Cotton Mills (N. C.) Pfd.....	99	105
Louise Mills (N. C.).....	90	95
Louise Mills (N. C.) Pfd.....	102	
Mariboro Cotton Mills (S. C.).....	90	
Mayo Mills (N. C.).....	150	200
Mills Mfg. Co. (S. C.).....	109	
Molokoh Mfg. Co. (S. C.).....	103	
Monaghan Mills (S. C.).....	112	
Monarch Cotton Mills (S. C.).....	100	105
Newberry Cotton Mills (S. C.).....	127	
Ninety-Six Cotton Mills (S. C.).....	104	
Norris Cotton Mills (S. C.).....	106	
Odell Mfg. Co. (N. C.).....	90	
Olympia Cotton Mills (S. C.).....	70	80
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	
Orr Cotton Mills (S. C.).....	107	
Pacolet Mfg. Co. (S. C.).....	165	180
Pacolet Mfg. Co. (S. C.) Pfd.....	101	104
Pelzer Mfg. Co. (S. C.).....	167	175
Piedmont Mfg. Co. (S. C.).....	167	
Poe Mfg. Co. F. W. (S. C.).....	125	130
Raleigh Cotton Mills (N. C.).....	100	
Richland Cot. Mills (S. C.) Pfd.....	59	
Roanoke Mills (N. C.).....	118	
Saxon Mills (S. C.).....	124	127
Shibley Mfg. Co. (Ga.).....	58	
Southern Cotton Mills (N. C.).....	63	
Spartan Mills (S. C.).....	149	152
Springstein Mills (S. C.).....	100	
Trilon Mfg. Co. (Ga.).....	132	140
Tucapau Mills (S. C.).....	190	
Union-Buffalo 1st Pfd.....	70	75
Union-Buffalo 2d Pfd.....	20	27
Victor Mfg. Co. (S. C.).....	130	
Warren Mfg. Co. (S. C.).....	97	100
Warren Mfg. Co. (S. C.) Pfd.....	106	107
Washington Mills (Va.).....	25	
Washington Mills (Va.) Pfd.....	100	105
Whitney Mfg. Co. (S. C.).....	150	
Wiscasset Mills (N. C.).....	119	
Woodruff Cotton Mills (S. C.).....	132	

#### State Banks in Mississippi.

The State Auditor has issued a summary showing the financial condition of 280 State banks in Mississippi June 26, 1907, as compared with 269 banks May 10, 1906: 1907, aggregate resources \$59,653,455; for 1906, \$57,110,727; increase, \$2,532,727. Loans and discounts, 1907, \$41,680,611; for 1906, \$38,086,861; increase, \$2,693,750. Sight exchange and cash on hand, 1907, \$9,552,895; 1906, \$8,754,669; increase, \$798,226. Capital paid in, 1907, \$12,022,648; for 1906, \$11,393,019; increase, \$629,629. Surplus and undivided profits, 1907, \$4,953,773; 1906, \$4,333,966; increase, \$619,807. Individual deposits, 1907, \$33,261,900; 1906, \$32,228,092; increase, \$1,033,898. Time certificates of deposits, due other banks and bills payable, 1907, \$9,072,012; 1906, \$8,589,344; increase, \$482,668.

#### New Corporations.

The First State Bank of Sabinal at Sabinal, Texas, has begun business.

The Citizens' Bank of Woodburg, Ky., capital \$15,000, has filed articles of incorporation.

A \$10,000 bank has been established at St. Joe, Ark., with Thomas B. Brown, president, and W. R. Keene, cashier.

The Union Savings Bank & Trust Co. of Macon, Ga., is reported reorganized with Judge Charles L. Bartlett as president.

The Bank of Reeds at Reeds, Mo., has been incorporated with \$10,000 capital by J. D. Davis, C. V. Rienhart, H. H. Beckwith and others.

The Horton Real Estate & Insurance Co. of Anderson, S. C., has applied for a commission; capital \$50,000. E. R. and L. S. Horton are the incorporators.

The Citizens' Bank of Nepton, Ky., has begun business with J. W. Myall, president; W. Y. Williams, vice-president, and R. G. Wilnot of Broadhead, cashier.

The Carmine State Bank of Carmine, Texas, capital \$10,000, has been incorporated by H. and Otto Eichler, Ernest Nagel and about 50 others.

The Madisonville Savings Bank of Mad-

isonville, Ky., has been incorporated with \$25,000 capital by C. C. Givens, Ira M. Hanner and Lee Gibson of Madisonville.

The Bank of Finger at Finger, Tenn., has been incorporated with \$10,000 capital by R. B. Moore, Jr., J. T. Floyd, L. A. Weaver, F. E. Miller and R. A. McIntyre.

The State Bank of Laurinburg, N. C., has been chartered with \$40,000 capital. The incorporators are J. P. McNair, K. G. Blue, D. C. McNeill, J. A. Jones and others.

The Georgia Fire Insurance Co. of Cedartown, Ga., capital \$100,000, has been granted a charter. William J. Harris, E. M. Langford and others are incorporators.

A savings bank capitalized at \$200,000 is reported being organized at St. Louis, Mo., by Francis A. Drew, formerly St. Louis manager of the Pittsburg Plate Glass Co.

The principal office of the Co-operative Bank & Trust Co. is to be located at Oklahoma City, O. T., and not Guthrie, as reported in the last issue of the MANUFACTURERS' RECORD.

The First National Bank of Warner, I. T., capital \$25,000, has been authorized to begin business with T. G. Overstreet, president; John Shinn, vice-president, and H. C. Wynne, cashier.

The First National Bank of Oakville, Texas, capital \$25,000, has been authorized to begin business with Thornton Hamilton, president; Lee Hinton, vice-president, and D. T. Blair, cashier.

The Groves National Bank of Hollis, O. T., has been approved; capital \$25,000. The organizers are W. B. Groves, Jas. W. Scott, J. N. Lindsey, L. H. Bellah and J. D. Bellah.

The Decatur Street Bank at Atlanta, Ga., capital \$25,000, has been granted a charter. The incorporators are W. D. Manley, N. K. Smith, M. M. Anderson and J. A. Sasser of Atlanta.

The Bank of Gibbon at Gibbon, O. T., has been incorporated with \$10,000 capital by Charles Matthews of Gibbon, A. W. Mallory, C. E. Wetmore, H. A. Bull and F. L. Clinesmith of Wakita.

The Bank of Crystal River at Crystal River, Fla., is reported to have begun business with C. E. Herrick, president; John T. Rawls, vice-president; A. S. King, secretary and treasurer.

The First National Bank of Florala, Ala., capital \$50,000, has been approved. G. E. Malone, Dothan, Ala.; E. R. Malone, A. Y. Malone, J. W. Malone and Robert Boyd are the organizers.

The Arkansas National Bank of Eureka Springs, Ark., capital \$50,000, has been approved. The organizers are B. H. Blockson, W. E. Perkins, R. B. Kelley, C. F. Humphreys and R. S. Granger.

The MANUFACTURERS' RECORD is informed that the Whitesburg Banking Co. of Whitesburg, Ga., has organized with Jethro Jones, president; Dr. J. R. M. Carter, vice-president, and W. T. Jones, cashier.

A new bank capitalized at \$25,000 is being organized at San Augustine, Texas, by T. H. Nees of Houston, formerly cashier of the Farmers' National Bank of Center; T. H. Kemper of Galveston and others.

The Elkins Loan Association of Elkins, W. Va., has been chartered with \$50,000 capital. The incorporators are W. H. Cobb, S. T. Spears, J. T. Lingafelter, H. W. Daniels, J. C. Kibler and others of Elkins.

The Maxfield National Bank of Batesville, Ark., has been approved; capital \$50,000. The organizers are Theodore Maxfield, A. A. Maxfield, T. Sydney Maxfield, Paxton Thomas, Charles F. Cole and Edgar L. Givens.

The North Louisiana Realty & Abstract

Co., Ltd., has been incorporated at Minden, La., with \$5000 capital. The directors are H. A. Davis, president; J. N. Sandlin, vice-president, and J. F. Colbert, secretary and treasurer.

The Farmers' Bank of Springtown, Ark., capital \$20,000, will begin business August 1 with Dr. J. L. Clemmer, president; E. E. Wilson, vice-president; C. M. Scott, secretary-treasurer; E. B. Baker and L. M. Leach, directors.

The directors of the People's National Bank of Abingdon, Va., are D. A. Preston, J. W. Hortenstein, H. H. Scott, L. T. Crosby, W. T. McConnell, W. M. Slemph, M. H. Honaker, Jas. Faulkner, G. L. Hoskins, L. R. Litton and W. B. Robertson.

The Protective Life Insurance Co. of Birmingham, Ala., has filed articles of incorporation; capital \$400,000. The officers are W. D. Jelks, president; Richard W. Massey, vice-president; John M. Corr, director of agents, and W. W. Crawford, treasurer.

The Farmers and Merchants' Bank of Muenster, Texas, has been chartered with \$10,000 capital. The directors are T. R. H. Smith, president; J. W. Downard, Gainesville; August Grube, vice-president; J. H. Theisan, cashier, and William Harwerth, Muenster.

A deal has been closed whereby the Mechanics' Bank & Trust Co., just organized at Knoxville, Tenn., with \$500,000 capital by Bird M. Robinson of New York and others, secures control of the Mechanics' National Bank and the Tennessee Banking & Trust Co., both of Knoxville, Tenn.

The Provident Bank & Trust Co. (said to be a negro organization) has been organized at Fort Worth, Texas, with \$50,000 capital. R. C. Houston will be president, and among the directors are Dr. J. M. Mosely, Prof. W. M. Coleman, S. P. Allen, C. C. Crook, George Garrett and Dr. P. R. Robertson.

The Merchants and Farmers' Bank of Mansfield, Ark., has filed articles of incorporation; capital \$25,000. The directors are J. M. Spaulding of Hartford, Ark., president; J. M. Marshall, vice-president, and J. F. Anderson, cashier, both of Mansfield; J. T. Owen, John Smeadley, N. B. Miller and T. P. Edwards.

The Gainesville National Bank of Gainesville, Fla., has begun business with \$100,000 capital. The directors are T. W. Shands, president; William R. Steckedt, vice-president; Chas. A. Faircloth, cashier; directors, J. L. Medlin, Henry Davis, John F. Jackson, Robert D. Crawford and M. H. DePass.

The Humphreys County Bank at Denver, Tenn., is about to begin business with \$12,500 capital. The officers are Ernest Easley, cashier; V. A. Bushing, president; J. D. Pickett, vice-president; J. M. Waggoner, J. D. Pickett, W. M. Stribling, J. D. McCrary, G. G. Gould, T. E. Ayers and V. A. Bushing, directors.

The Farmers and Citizens' Bank of Gleason, Tenn., capital \$25,000, has elected the following officers: J. K. P. Alexander, president; J. J. Campbell, vice-president; W. H. Williams, cashier; directors, A. C. Edwards, chairman; Dr. Allman, J. H. Bandy, G. W. Adams, W. H. Parks, T. N. Drewery and T. A. Lovelace.

A State bank with \$10,000 capital has been organized at Telephone, Texas, with the following directors: Dr. Cravens, president; John T. Adams, cashier; E. D. Steger of Bonham, C. F. Christensen of Ravenna, O. B. Mitchell, Mrs. N. O. Stallings, George Moore and J. M. Darling. Business is to begin about September 1.

The Citizens' Bank of Banks, Ark., has been incorporated with \$10,000 capital by J. D. McFarland, president; J. C. Brat-

ton, vice-president; T. J. Bratton, secretary and treasurer; D. W. Bass, D. F. Wilson, D. W. McLeod, J. H. Splawn, S. F. Croft, J. A. Lee, W. R. Cooper, Betty Splawn, Elmer A. Morris, W. T. Jeffers, J. A. Whittington, W. E. Edrington, S. L. Kyser, W. R. Jeffers, R. F. Powers and A. B. Banks.

The Federal American Banking Corporation is being organized at Washington, D. C., with \$5,000,000 authorized capital. The incorporators are Philip G. Affleck, vice-president of the Citizens' Savings Bank; Harry P. Huddleston, Charles W. Darr, Rignald W. Beall, William T. Griffith of Beallsville, Md.; Gustave Bender, John W. Holcombe and Cornelius Eckhardt. The bank is expected to begin business in September with \$100,000 capital.

#### New Securities.

Aurora, Mo.—Reports state the city will issue \$25,000 of park bonds.

Bartlett Texas.—The MANUFACTURERS' RECORD is informed that the city voted July 22 to issue \$20,000 of 4½ per cent. 40-year school-building bonds. G. A. Lindemann is City Secretary.

Beaumont, Texas.—The city is offering for sale \$23,000 of 5 per cent. 20-year bonds of South Park school district.

Bessemer, Ala.—An election is to be held September 9 to vote on \$50,000 of school, \$25,000 of sewer and \$7500 of fire department bonds.

Bluefield, W. Va.—Messrs. A. B. Leach & Co. of New York have been awarded at par \$100,000 of 5 per cent. 30-year street and sewer bonds.

Booneville, Ark.—Bids will be received until 2 P. M. August 10 by M. G. Latimer, secretary School Board, for \$20,000 of 4 per cent. 20-year school-building bonds.

Bowie, Texas.—Bowie independent school district has voted \$37,500 of bonds, \$30,000 for school building and site and \$7500 for bonded indebtedness.

Browning, Mo.—City Clerk J. Kille is offering at private sale \$6000 of 5-20-year electric-light bonds.

Brownsville, Tenn.—Bids will be received until noon August 10 by R. M. Chambliss, secretary bond committee, for \$30,000 of 5 per cent. 30-year street-improvement bonds.

Butler, Mo.—An election is to be held to vote on \$20,000 of bonds of Butler school district.

Carthage, Mo.—Reports state that the city proposes to issue \$220,000 of 5 per cent. 5-15-year water-works plant bonds.

Charlotte, N. C.—Reports state that arrangements are being made for the sale of \$75,000 of municipal improvement bonds.

Clinton, Mo.—The \$70,000 of municipal water-works bonds voted some months ago have been declared illegal.

Commerce, Texas.—Bids will be received until 8 P. M. August 5 by C. E. Randle, City Secretary and Treasurer, for \$16,000 of 4½ per cent. 20-30-year water-works bonds.

Covington, Va.—Alleghany county has sold \$18,000 of jail bonds as follows: National Exchange Bank of Roanoke, \$4000 at 103; J. L. Mann, Falling Spring valley, \$2000 at 101.25; J. W. Mann, Falling Spring valley, \$2000 at 101.25; Covington National Bank, Covington, \$5500 at 101.25; W. H. McConihay, Covington, \$4500 at 101.25.

Elizabeth City, N. C.—Bids will be received until noon September 2 for \$50,000 of 5 per cent. 20-year bonds, \$30,000 being for street improvement and \$20,000 to purchase stone curbing. R. T. Whitehurst is City Clerk.

Elkins, W. Va.—The MANUFACTURERS' RECORD is informed that the city voted

[For Additional Financial News, See Pages 56 and 57.]



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